

1 GGACACTGAC ATGGACTGAA GGAGTAGAAA GCTGGAGTGA CACTGCAGTG  
 51 GGCTTCTCCG TAGCCCCAGC CTTCAGGCTG CGCAGCCCCT AACCTGCCGG  
 101 CACCGCTTTT GGAAGCAGC TTGGCTCTTC CATCTCCCA AGCCTTCCTC  
 151 TCCATCCCTT CATCCACCC TCGCCGATCT TACTTTTCT TTTACCCACG  
 201 GGGCCGCGC CGGCCACCC CTGGCCGGTG CAAACACCCA AGCCCTCTCC  
 251 AGTTCTCCCC CAAGCTAATA TTTTCCCACC TGTCTTTTC TGGGGTTCCT  
 301 CCACGAGCCA GTCCAAGGCT CCCCATCCT CGGAAATTGT TTTGTTGGAC  
 351 TGCTAAACCG AGGCGTGTA AGCTTGAGGA CTTTATTATT ATTTGGGTTC  
 401 TTTTCATTTC TTCCCCCTCT GGGCAACGAA GCAATGAAAT TTCCAATCGA  
 451 GACGCCAAGA AAACAGGTGA ACTGGGATCC TAAAGTGGCC GTTCCCGCAG  
 501 CAGCACCGGT GTGCCAGCCC AAGAGCGCCA CTAACGGGCA ACCCCCGGCT  
 551 CCGGCTCCGA CTCCAACCTC GCGCCTGTCC ATTTCTCTCC GAGCCACAGT  
 601 GGTAGCCAGG ATGGAAGGCA CCTCCCAAGG GGGCTTGCAG ACCGTCATGA  
 651 AGTGAAGAC GGTGGTTGCC ATCTTTGTGG TTGTGGTGGT CTACCTGTC  
 701 ACTGGCGGTC TTGTCTTCCG GGCATTGAG CAGCCCTTTG AGAGCAGCCA  
 751 GAAGAATACC ATCGCCTTGG AGAAGGCGGA ATTCCTGCGG GATCATGTCT  
 801 GTGTGAGCCC CCAGGAGCTG GAGACGTTGA TCCAGCATGC TCTTGATGCT  
 851 GACAATGCGG GAGTCAGTCC AATAGGAAAC TCTTCCAACA ACAGCAGCCA  
 901 CTGGGACCTC GGCAGTGCCT TTTTCTTTGC TGGAAGTGTG ATTACGACCA  
 951 TAGGGTATGG GAATATTGCT CCGAGCACTG AAGGAGGCAA AATCTTTTGT  
 1001 ATTTTATATG CCATCTTTGG AATTCCACTC TTTGGTTTCT TATTGGCTGG  
 1051 AATTGGAGAC CAACTTGGA CCATCTTTGG GAAAAGCATT GCAAGAGTGG  
 1101 AGAAGGTCTT TCGAAAAAG CAAGTGAGTC AGACCAAGAT CCGGGTCATC  
 1151 TCAACCATCC TGTTCACTCT GGCCGGCTGC ATTGTGTTTG TGACGATCCC  
 1201 TGCTGTCATC TTTAAGTACA TCGAGGGCTG GACGGCCTTG GAGTCCATTT  
 1251 ACTTTGTGGT GGTCACTCTG ACCACGGTGG GCTTTGGTGA TTTTGTGGCA  
 1301 GGGGGAACG CTGGCATCAA TTATCGGGAG TGGTATAAGC CCCTAGTGTG  
 1351 GTTTTGGATC CTTGTTGGCC TTGCCTACTT TGCAGCTGTC CTCAGTATGA  
 1401 TCGGAGATTG GCTACGGGTT CTGTCCAAAA AGACAAAAGA AGAGGTGGGT  
 1451 GAAATCAAGG CCCATGCGGC AGAGTGGAAG GCCAATGTCA CGGCTGAGTT  
 1501 CCGGGAGACA CGGCGAAGGC TCAGCGTGGA GATCCACGAT AAGCTGCAGC  
 1551 GGGCGGCCAC CATCCGCAGC ATGGAGCGCC GGCGGCTGGG CCTGGACCAG  
 1601 CCGGCCCCACT CACTGGACAT GCTGTCCCCC GAGAAGCGCT CTGTCTTTGC  
 1651 TGCCCTGGAC ACCGGCCGCT TCAAGGCCTC ATCCCAGGAG AGCATCAACA  
 1701 ACCGGCCCCA CAACCTGCGC CTGAAGGGGC CGGAGCAGCT GAACAAGCAT  
 1751 GGGCAGGGT CGTCCGAGGA CAACATCATC AACAAGTTCG GGTCCACCTC  
 1801 CAGACTCACC AAGAGGAAAA ACAAGGACCT CAAAAAGACC TTGCCCAGG  
 1851 ACGTTCAGAA AATCTACAAG ACCTTCCGGA ATTACTCCCT GGACGAGGAG  
 1901 AAGAAAGAGG AGGAAACGGA AAAGATGTGT AACTCAGACA ACTCCAGCAC  
 1951 AGCCATGCTG ACGGACTGTA TCCAGCAGCA CGCTGAGTTG GAGAACGGAA  
 2001 TGATACCCAC GGACACCAAA GACCGGGAGC CGGAGAACAA CTCATTACTT  
 2051 GAAGACAGAA ACTAA

**FEATURES:**

5'UTR: 1 - 433

Start Codon: 434

Stop Codon: 2063

3'UTR: 2066

**HOMOLOGOUS PROTEINS:**Top 10 BLAST Hits:

			Score	E
gi 10863961	ref NP_066984.1	potassium channel, subfamily K, me...	1054	0.0
gi 8452900	gb AAF75132.1	AF196965_1 (AF196965) potassium channe...	1037	0.0
gi 6754432	ref NP_034737.1	potassium channel, subfamily K, mem...	486	e-136
gi 5712621	gb AAD47569.1	AF129399_1 (AF129399) TREK-1 potassium...	483	e-135
gi 9622335	gb AAF89743.1	AF171068_1 (AF171068) two-pore domain ...	483	e-135
gi 4101566	gb AAD01203.1	(AF004711) two-pore potassium channel...	473	e-132
gi 7705562	ref NP_057695.1	potassium inwardly-rectifying chann...	318	9e-86
gi 6680540	ref NP_032457.1	potassium channel, subfamily K, mem...	309	4e-83
gi 9988112	emb CAC07336.1	(AL136087) dJ137F1.2 (novel member o...	201	2e-50
gi 4504851	ref NP_003731.1	potassium channel, subfamily K, mem...	180	4e-44

BLAST to dbEST:

	Score	E
gi 3400036 /dataset=dbest /taxon=9606 ...	293	6e-77

**EXPRESSION INFORMATION FOR MODULATORY USE:**

library source:

Expression information from BLAST dbEST hit:

gi|3400036 Human testis

Expression information from PCR-based tissue screening panels:

Human bone marrow  
Human colon  
Human fetal brain  
Human fetal heart  
Human feftal liver  
Human heart  
Human kidney  
Human pancreas  
Human testis

1 MKFPIETPRK QVNWDPKVAV PAAAPVCQPK SATNGQPPAP APTPTPRLSI  
 51 SSRATVVARM EGTSQGLQT VMKWKTVAI FVVVVVYLVT GGLVFRALQ  
 101 PFESSQKNTI ALEKAEFLRD HVCVSPQELE TLIQHALDAD NAGVSPIGNS  
 151 SNNSSHWDLG SAFFFAGTVI TTIGYGNIAF STEGGKIFCI LYAIFGIPLF  
 201 GFLLAGIGDQ LGTIFGKSI RVEKVFRKKQ VSQTKIRVIS TILFILAGCI  
 251 VFVTIPAVIF KYIEGWTALE SIYFVVVTLT TVGFGDFVAG GNAGINYREW  
 301 YKPLVFWFNL VGLAYFAAVL SMIGDWLRVL SKKTKEEVGE IKAHAAEWKA  
 351 NVTAEFRETR RRLSVEIHDK LQRAATIRSM ERRRLGLDQR AHSLDMLSPE  
 401 KRSVFAALDT GRFKASSQES INNRPNLRL KGPEQLNKHG QGASEDNIIN  
 451 KFGSTSRLTK RKNKDLKKTLL PEDVQKIYKT FRNYSLDEEK KEEETKMCN  
 501 SDNSSTAMLT DCIQQHAELE NGMIPTDTKD REPENNSLLE DRN

# **FEATURES:**

## **Functional domains and key regions:**

[1] PDOC00001 PS00001 ASN\_GLYCOSYLATION  
 N-glycosylation site

Number of matches: 7

1	149-152	NSSN
2	152-155	NNSS
3	153-156	NSSH
4	351-354	NVTA
5	483-486	NYSL
6	503-506	NSST
7	535-538	NNSL

[2] PDOC00004 PS00004 CAMP\_PHOSPHO\_SITE  
 cAMP- and cGMP-dependent protein kinase phosphorylation site

361-364 RRLS

[3] PDOC00005 PS00005 PKC\_PHOSPHO\_SITE  
 Protein kinase C phosphorylation site

Number of matches: 12

1	7-9	TPR
2	45-47	TPR
3	7-9	TPR
4	45-47	TPR
5	51-53	SSR
6	105-107	SQK
7	331-333	SKK
8	359-361	TRR
9	376-378	TIR
10	410-412	TGR
11	455-457	TSR
12	459-461	TKR

[4] PDOC00006 PS00006 CK2\_PHOSPHO\_SITE  
 Casein kinase II phosphorylation site

Number of matches: 8

1	125-128	SPQE
2	155-158	SHWD
3	267-270	TALE
4	334-337	TKEE
5	416-419	SSQE
6	469-472	TLPE
7	485-488	SLDE
8	537-540	SLLE

[5] PDOC00008 PS00008 MYRISTYL

N-myristoylation site

Number of matches: 8

1	62-67	GTSQGG
2	66-71	GGLQTV
3	148-153	GNSSNN
4	167-172	GTVITT
5	212-217	GTIFGK
6	290-295	GGNAGI
7	440-445	GQGASE

Membrane spanning structure and domains:

Helix	Begin	End	Score	Certainty
1	81	101	2.130	Certain
2	165	185	1.764	Certain
3	193	213	2.281	Certain
4	244	264	2.380	Certain
5	275	295	1.436	Certain
6	310	330	2.210	Certain



**BLAST Alignment to Top Hit:**

>gi|10863961|ref|NP\_066984.1| potassium channel, subfamily K, member  
10 [Homo sapiens] >gi|10198115|gb|AAG15191.1|AF279890\_1  
(AF279890) 2P domain potassium channel TREK2 [Homo  
sapiens]  
Length = 538

Score = 1054 bits (2697), Expect = 0.0  
Identities = 526/526 (100%), Positives = 526/526 (100%)  
Frame = +1

Query: 52 VAVPAAAPVCQPKSATNGQPPAPAPTPTPRLSISSRATVVARMEGTSQGGLOTVMKWKT V 231  
VAVPAAAPVCQPKSATNGQPPAPAPTPTPRLSISSRATVVARMEGTSQGGLOTVMKWKT V  
Sbjct: 13 VAVPAAAPVCQPKSATNGQPPAPAPTPTPRLSISSRATVVARMEGTSQGGLOTVMKWKT V 72

Query: 232 VAI FVVVVVYLVTGGLVFRAL EQPFESSQKNTIALEKAEFLRDHVCVSPQELET LIQHAL 411  
VAI FVVVVVYLVTGGLVFRAL EQPFESSQKNTIALEKAEFLRDHVCVSPQELET LIQHAL  
Sbjct: 73 VAI FVVVVVYLVTGGLVFRAL EQPFESSQKNTIALEKAEFLRDHVCVSPQELET LIQHAL 132

Query: 412 DADNAGVSPIGNSSNNSSHWDLGSAFFFA GTVIT TIGYGN IAPSTEGGKIFC ILYAIFGI 591  
DADNAGVSPIGNSSNNSSHWDLGSAFFFA GTVIT TIGYGN IAPSTEGGKIFC ILYAIFGI  
Sbjct: 133 DADNAGVSPIGNSSNNSSHWDLGSAFFFA GTVIT TIGYGN IAPSTEGGKIFC ILYAIFGI 192

Query: 592 PLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVISTILFILAGCIVFVTIPA 771  
PLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVISTILFILAGCIVFVTIPA  
Sbjct: 193 PLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVISTILFILAGCIVFVTIPA 252

Query: 772 VIFKYIEGWTALES IYFVVVTLTTVGFGDFVAGGNAGIN YREWYKPLVWFILVGLAYFA 951  
VIFKYIEGWTALES IYFVVVTLTTVGFGDFVAGGNAGIN YREWYKPLVWFILVGLAYFA  
Sbjct: 253 VIFKYIEGWTALES IYFVVVTLTTVGFGDFVAGGNAGIN YREWYKPLVWFILVGLAYFA 312

Query: 952 AVL SMIGDWLRVLSKKTKEEVGEI KAHAAEWKANVTAEFRETRRRLSVEI HDKLQRAATI 1131  
AVL SMIGDWLRVLSKKTKEEVGEI KAHAAEWKANVTAEFRETRRRLSVEI HDKLQRAATI  
Sbjct: 313 AVL SMIGDWLRVLSKKTKEEVGEI KAHAAEWKANVTAEFRETRRRLSVEI HDKLQRAATI 372

Query: 1132 RSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQESINNRPNLRLKGPEQLN 1311  
RSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQESINNRPNLRLKGPEQLN  
Sbjct: 373 RSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQESINNRPNLRLKGPEQLN 432

Query: 1312 KHGQGASEDN IINKFGST SRLTKRKNKDLKKTLPEDVQKIYKTFRNYSLDEEKKEEET EK 1491  
KHGQGASEDN IINKFGST SRLTKRKNKDLKKTLPEDVQKIYKTFRNYSLDEEKKEEET EK  
Sbjct: 433 KHGQGASEDN IINKFGST SRLTKRKNKDLKKTLPEDVQKIYKTFRNYSLDEEKKEEET EK 492

Query: 1492 MCNSDNSSTAMLTDCIQQHAELENGMIPTDTKDREPENNSLLED RN 1629  
MCNSDNSSTAMLTDCIQQHAELENGMIPTDTKDREPENNSLLED RN  
Sbjct: 493 MCNSDNSSTAMLTDCIQQHAELENGMIPTDTKDREPENNSLLED RN 538

>gi|8452900|gb|AAF75132.1|AF196965\_1 (AF196965) potassium channel  
TREK-2 [Rattus norvegicus]  
Length = 538

Score = 1037 bits (2653), Expect = 0.0  
Identities = 520/543 (95%), Positives = 529/543 (96%), Gaps = 1/543 (0%)  
Frame = +1

Query: 1 MKFPIETPRKQVNWDPKVAVPAAAP-VCQPKSATNGQPPAPAPTPTPRLSISSRATVVAR 177  
MKFPIETPRKQVNWDPKVAVPAAAP VCQPKSATNG P P RLSISSRATVVAR  
Sbjct: 1 MKFPIETPRKQVNWDPKVAVPAAAPVCQPKSATNGHHPV-----RLSISSRATVVAR 54

Query: 178 MEGTSQGGLOTVMKWKT VVAI FVVVVVYLVTGGLVFRAL EQPFESSQKNTIALEKAEFLR 357  
MEG SQGGLOTVMKWKT VVAI FVVVVVYLVTGGLVFRAL EQPFESSQKNTIALEKAEFLR  
Sbjct: 55 MEGASQGGLOTVMKWKT VVAI FVVVVVYLVTGGLVFRAL EQPFESSQKNTIALEKAEFLR 114

Query: 358 DHVCSVPQELETLIQHALDADNAGVSPIGNSSNNSSHWDLGSAFFFAAGTVITTIGYGNIA 537  
DH+CVSPQELETLIQHALDADNAGVSP+GNSSN+SSHWDLGSAFFFAAGTVITTIGYGNIA  
Sbjct: 115 DHICVSPQELETLIQHALDADNAGVSPVGNSSNSSSHWDLGSAFFFAAGTVITTIGYGNIA 174

Query: 538 PSTEGGKIFCILYAIFGIPLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVI 717  
PSTEGGKIFCILYAIFGIPLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVI  
Sbjct: 175 PSTEGGKIFCILYAIFGIPLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVI 234

Query: 718 STILFILAGCIVFVTIPAVIFKYIEGWTALESIFYVVVTLTTVGFGDFVAGGNAGINYRE 897  
STILFILAGCIVFVTIPAVIFKYIEGWTALESIFYVVVTLTTVGFGDFVAGGNAGINYRE  
Sbjct: 235 STILFILAGCIVFVTIPAVIFKYIEGWTALESIFYVVVTLTTVGFGDFVAGGNAGINYRE 294

Query: 898 WYKPLVWFILVGLAYFAAVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRET 1077  
WYKPLVWFILVGLAYFAAVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRET  
Sbjct: 295 WYKPLVWFILVGLAYFAAVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRET 354

Query: 1078 RRRLSVEIHDKLQRAATIRSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQE 1257  
RRRLSVEIHDKLQRAATIRSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQE  
Sbjct: 355 RRRLSVEIHDKLQRAATIRSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQE 414

Query: 1258 SINNRPNLRLKGPQLNKHGQGASEDNIINKFGSTSRCLKRKNKDLKKTLPEDVQKIYK 1437  
SINNRPNLRLKGPQLNKHGQGASEDNIINKFGSTSRCLKRKNKDLKKTLPEDVQKIYK  
Sbjct: 415 SINNRPNLRLKGPQLNKHGQGASEDNIINKFGSTSKLTKRKNKDLKKTLPEDVQKIYK 474

Query: 1438 TFRNYSLDEEKKEETEKMCNSDNSSTAMLTDCIQQAELNGMIPTDTKDREPENNSLL 1617  
TFRNYSLDEEKKE+ETEKMCNSDNSSTAMLT+CIQQ AE+ENGM+P DTKD+ ENNSLL  
Sbjct: 475 TFRNYSLDEEKKEDETEKMCNSDNSSTAMLTECIQQAEMENGMVPMDDTKDQGLENNSSLL 534

Query: 1618 EDRN 1629  
EDRN  
Sbjct: 535 EDRN 538

Model	Description	Score	E-value	N
PF00914	Transmembrane region cyclic Nucleotide Gated	17.5	0.00072	2

Model	Domain	seq-f	seq-t	hmm-f	hmm-t	score	E-value
PF00914	1/2	161	201 ..	142	182 ..	15.7	0.0023
PF00914	2/2	271	286 ..	143	158 ..	8.0	0.33

FIGURE 2, page 4 of 4

1 CCTAAGGGTG CAGTTCCTGC CACAGGAATT TGCCTTGGAC AGTGAACATA  
 51 TTCCCCAATG CAGACCCAG AACACAACCA TAGGTCAGTT CATTTTGCAA  
 101 AGGAGAGGGG CCTGGAGGCT TGGAAAATAT CGTATTAGTA CCTTCATTAC  
 151 CCAAACGAAC CCATGGGACA GGTTTCAGGGT CAGATTCATG GGTCCCGGGA  
 201 CTGGATGAGC TCACAAGGTT CTGGCATGGA GAGCATGGAC CTTTGTGTCA  
 251 ACAAACCTGG GTTTGAATCC TCATATCGTG ACCTTGGGAA TGTTTCTTTA  
 301 TCTCTCTGAG CCTTGATCTT CTCATCTGTA AAAGGAGGCC AGTTACAGCT  
 351 TCTGCAAAAT GATCTAACAA AGATGAATGG AGAGGAAATA TGAGATGGTG  
 401 AGGGGGAATT CAGTAAATGT CAATCTTGCC TCCCGTGCT CTGAGGACTC  
 451 AGGAGAGGGT GCCTTTCTCT GCTGAAGCCC CTCTCTGACT CTGATGCATG  
 501 TAAAAAACAT TGTATTGCAG TGACTGTGCT AGAGTCCAGC TGTCCGTGAA  
 551 CAGTTAAAGA GAAGAGCGCA GAGGGAGGTT CGAAAGCCTT TCTTAGAAGC  
 601 ATCTCCCTCT GGACTTGAGA ACAGAATTTA CATAACACT GGTGTCTCGG  
 651 GGCATGCTCG GGAGAAGCAG AGATTCCTTG TTTGTTTGAT TTCTATGTCT  
 701 TAGCCATCCT CCCAGTCCTA GTAGAGAGAG GCAAAGTGTG GTTACAGAGT  
 751 CCAGGGAAGA TGGTTCGTAA GCACCCGGA ACCTGCCTAA AGGGCTGAAG  
 801 AGTCAGAGTA GCACCATCAG ATTGGTACCA GTTTTGCTG AACGGGGTTT  
 851 GCAGAGAATT CAGGGCTCCA GCCTGGGGTG CCTGTGACAG CCCAGTGACA  
 901 AAGCACTCAC CTTTCCCACA GACCACAGCG GACCTCTGTA GGTCTTGCTC  
 951 TTGGACTCAG AAACCTTGAT GTGATAGTGA GGGATGGATG GTGAGAAAGA  
 1001 TGCTGCTGAC ACAGGGCTCC CCAGAAAGCCT CAAGGTGCCG TAGAGTAGCA  
 1051 TGCAACTTAG AGATCAGCTG CTAGTGTGGG ATTTTAGGAC CCCAGCTGGC  
 1101 AGGCATAGGA ATGAGCTGGG CAATTTCTAT GCGTAAAGTA AGGCAACAAC  
 1151 AATCTAACAG GACCTTATGG CACTAGATAG TAAGCCCAT GAAGGCAAGA  
 1201 TCTCTGTCTT GTTCTCTGCC ATATGGCCAG CACATAGCAC AGTGATGGCA  
 1251 CTTGGAAGGG GTTCAATATA TATGTTGAAT GAACAACAAA TTTTAGTAAC  
 1301 CTTATCTGGA AGCCAGAGTA GGGGTTTAAA CTACTTCTTA TCCAACACTG  
 1351 CAGCATGCAA TTCATGTCTT CATTTAGCAA GTATTTCTTG AGCACCTACT  
 1401 ACGTGTAAGG CTCCGTTGCG AGGCATCCGA AGCAATTTGT CAGCATCATT  
 1451 CATGTTGATA CTCGGAGTGA CCCGTTCAAG AGCACCTCAG CACCACCTGG  
 1501 CTTTTCTGAA GACTGAGGCC CCACCACAAA CCCCTGTGGG GCTTCAAGCA  
 1551 GGGGAGTGA GAGGGCGTTA GACGAATGCT CCAGGTTTAG CCCCTTTCCG  
 1601 GGAACAGGTC TGGGTCCCTT CGCATCTGCC CTGCTGGTCC CAGGATCCCG  
 1651 GGGCCGCGCG TTCCGGGAGC TGCCGGGTCT TGGCAACTCC GCTTCTCTCC  
 1701 GGGGGCCCCC GTGCCCTCTT CAAGCCTCCT TTCCAGCCAA CGACCAGCGG  
 1751 CCCAGTCCG GCTGCAGGTA GCTGGGGAAG GGACCAAGCT GTGCCCTGGG  
 1801 AGCGAGCTTC CCGGGCGGG GAGAGCGCAG CAGATGCGGA GCGGTCCAG  
 1851 AACAAAAGGC TCATGGCTGG CACGGGCTC CTTGGAGTGC GCGGGGACG  
 1901 TGGGTTCCGG ACTCAGGCGA GAGAGCCAGA CGCGGGAGGA AAAAAATGA  
 1951 AGTGAGAAAA GAGAAGGAGG GAGAGCTCAG GGTGAGAGCG GTGAGAAGAG  
 2001 GTGACCCGGA GGCCGAGGTC TGCGGCGGAG CCGCAGCGGC CTTCTCTCCG  
 2051 CCTCCTGCAG CGCCTTCCAG GCAACCAAGC GTGTCTCCGG CTGCAACTCC  
 2101 AGCAAGCGCG CCGTGCCGC CTCACGCCC GCGCGCGCG GCGCGGAGCC  
 2151 AGTAAGTAGC GCGCGGCCA CCGCTCGTTC CCGCCCCCTC GCGGGCTTCC  
 2201 CCGCCACCGC CCACCGCTC CCGCCGCCCC GCGGGCAAGT CCGCGACCGC  
 2251 CTCCCGCTGC CCGAGCCGG GTGCCGGGG CTCAGCGCGC CTTCCAGCT  
 2301 GGGAGCCTCG GTCCGCTGCT CGCCCTGCTC CTTCTTGCCG GGGCGCGGCG  
 2351 TCTGGGGCGC GCGCGGGGA GGGTCGCCCT CGCCGCGCGC TGCCCGGGCG  
 2401 CCGCGCCACC CCTACATCCA ATGGCTTTCG GGGAGCGGGA AGTGGGGGCG  
 2451 GTCGCGGGG GCGAGGAGCC GCGCGCGGG TGGGGCGTGT GCGCTCAGCG  
 2501 CGGCCGAGCG AGGCTGACGT GCGCGCCAA GCGCGCGCC GGGAGTGTGT  
 2551 GTGCGGGTGT GTGTGTGCGG GAGTGTGTGC GCACACGCT TCGGGGGCTG  
 2601 GAGTGACACT GCAGTGGGCT TCTCCGTAGC CCCAGCCTC AGGCTGCGCA  
 2651 GCCCCTAACC TGCCGGCACC GCTTTTGGGA AGCAGCTTGG CTCTTCCATC  
 2701 TCCCCAAGCC TTCCTCTCCA TCCTTTTATC CACCCCTCG CGATCTTACT  
 2751 TTTTCTTTTA CCCACGGGGC CGCGGCCGG CACCCCTGG CCGGTGCAAA  
 2801 CACCCAAGCC CTCTCCAGTT CTCCCCAAG CTAATATTTT CCCACCTGTC  
 2851 TTTTCTGGG GTTCTTCCAC GAGCCAGTCC AAGGCTCCCC CATCCTCGGA  
 2901 AATTGTTTTG TTGACTGCT AAACCGAGGC GTGTAAAGCT TGAGGACTTT  
 2951 ATTATTATTT GGGTCTTTT CATTTCTTCC CTTTCTGGG AACGAAGCAA  
 3001 TGAAATTTCC AATCGAGAC CCAAGAAAAC AGGTGAACTG GGATCCTAAA  
 3051 GGTGGGTGTT TCCTACTTTT GGCTGCCCTC GCCCTGCCCT TGCTCCGGC  
 3101 GTGTGCGCGC TTCCTTGAGT GGAAGCACTC TTGCTTCTGG CAGCGTGTGT

FIGURE 3, page 1 of 107

3151 CCTGAGGCTG GGAAATGCGC CTGGGAAGCTG CAGCGCGGGT GGGAGGAGGG  
3201 CGGAGGCAGC GTGGGTTCG AACCAGATA GTGCCTGTCA TTACCACATA  
3251 ATCATTGTCC CTCCTAGATT GTCTCCAGAT CTATTAGAT AGACCAAGCC  
3301 GACTGTTTGG TTTGAAATTG CAAGTGTCCG TATTTGCTTT TGACTTTGAG  
3351 TGTGCGAGTG TGTGTGTGTG TGTGTGTGTG TGTCCCTTGT TTCTGGTGAT  
3401 CTTTGTCTCT CTGGCAGATG GGTGGGGTGC TTCCCCCTGG ACCTGGAGCT  
3451 GCGCCGCTAG CCCGGGTGTC CTCAGTGGGA AAGGTTTCCT GGCAGCAAGT  
3501 GGGGCTCGAG TTGCAGCAGC CGTCCCTAGG GGTGGGCCGT TCTCGCAGGG  
3551 CATGCAGAAT AATGGAGCCC ACAGGGCCTC CTGAGTCTTC GTTCAATCTT  
3601 ATTACCAAAC CTAGGCACTA GTTAGGCTCA GGTCAAGTA GAAGCAGGAG  
3651 GAGGGTGGT TGTGAGAAG GGTGGGGCTG GCAAGGCATA GGGGAGGGGC  
3701 ACGAAGTGTG CCCGCCAAG CAATGGTGTG GTTTGCATGC TTTTACGAAT  
3751 GTTGGACCAG GTTTCATCCA CGCAAAGGG AGGGATTAAG ACGGATTGT  
3801 GTGTGCCTAG CGTCGGCCAC CGTGTCTGTA ATTAGCATAC AGATGTTAAG  
3851 GCTCCAAGGG AGTGATCAGT ATGAGAGCAG AACAAGTTGG AACCGCGTGT  
3901 CCAGTTGTGT CAAGAATGCT CTTTAGCATT TCTTGTAGCT CATCTGACGA  
3951 CTGTGTGAGG CTAGGCAACG CCTCTGTGTG TATTGGAATT GAAATTTGTT  
4001 TATTTGGGGT GCGTGTGTGT TTAATGTTCT TTATGAGCGC ATTTCTTCTT  
4051 TTTCTCCAGA CTGGAAAGAA GAAACCATCT TATTTGTTGA GTAAATGTCT  
4101 TAGGAAATGA CTGGCTATTG AAGAGTGAGT GAAGAGATAC TGCCTTTTGA  
4151 AAACACTGAG GCTGTTACAT CTTAAATACA GCCCAAACCT TCTATTTTGT  
4201 CTCTACTTGA AATCTCTGGA AATATGGAGG TGTGCCTTTG CTTTTTTGGG  
4251 GGGAGAAATCC CTGAAAGCA TATTTGTTAA ATACCTATTA CATGCTAAAC  
4301 ACTGTCTCTAA GCTCTGAGCA TACAGTCAGA ACAGGAAAGA TAAAAGCTCT  
4351 GACTTGGAGT TTACAGTGAG GGAGACAGAC CTAAATCAAT TCCATGGAGG  
4401 AATGCATAAT TCAAAGTTTA TGTATGCTCC AGGGAGAGCA TCAGAGGTTT  
4451 AAGAAAGTGT CTGATAGAAG AGATTGACAA GGACCAGAGA AGGCTTCCCT  
4501 GAGGACATGA CACTTGGACT TAGGCCTGGA GGATGTATAG GAGTTAATTG  
4551 TCTAAGGAGG AGGGGAATTG TTGCAGAAGA GGGAACAGCA AGTGCAAAGG  
4601 GCCTGAGGCA GAAGAGGTAT GTGTATATGA TGAAGTAAA GGAGGTTCCC  
4651 ATGGCTACGG CAGAGTGAGT GAAGAGGTAT TGCCTTTTTT AAACACCCAG  
4701 GCTGTTATAC TGTAATATACA GCACAAACCT TTCATTTTGT CTCTATTTGA  
4751 AACCTCTGGA AATACGGAAG TGTGCCTTGG CTTTCTTTTG GGAAATCCCT  
4801 GAAAAATGTA TTTATCCCTA GCAGAGAGCA AGAGGGCTTG TGTTTTGAGA  
4851 TATGACTGGG GGATCCACAG GCGAGACGCC CCCCTCCAAG CCCTGTGTTG  
4901 TTGGAGGTGG GGTAGCATTG TGGGGTTGGA AGAGTATAGT ATTTATCTAA  
4951 AGCCAAATGAA GAGTTTCAAG ACGAGGAGTG ACATGATTTG AGCTAAGTTT  
5001 CAAAACAAGT GCTGTGTGGC TCTTGTGGAT GTAGGGGACC AGATACAATG  
5051 GTAGCATGGG CCAGGGTGGT TGCTGTGGGC ATGGAGAAGC GGACGGAGTA  
5101 GAGAGCTGTA GAGGACGTGA AATCAACAGG CTTTGCATGA ATAATGTGTG  
5151 GAAGTGAAGT GAAGGAATTG GAATGACTGA GATGGCAGCC AGGGCAGGAC  
5201 CAGTCTTGAA GGAAGCTCA TGAGTTCAAT CTAGGACTTG TTGAGTAGGA  
5251 CATGTCCTCA AGCCATCCAA GGGGTGTGTT AGGTGGGCAG CTGTCTAAGT  
5301 GCTGGGGTCA GGATCTTCAA GGAACAGAGG GAGTACCGTG AGACTGATTT  
5351 TGTGAAGCTG GCTTTGTGTT TTAAGGTACA TTTCTGTGTG ATCATCATTC  
5401 TATATATTCA TGTTACAGTG ATGAACACAG ACAAATTTTA CACATTTTAC  
5451 AGCCTGACAC AGTGAAGAAA AGCATACAAA TAGCACCTTC AGTTACAACC  
5501 AGTGGTGCTA AAAATGAAAA AAACCTCAAT AAAAATAACA ACATTTAATG  
5551 AGCAACCATT GCATGCCAGG TGCTTTATGT ACATTGTTTC ATACAATTAT  
5601 TTTTACAATA CTTATCTGAT GGTATAAGTG TTATAGTTCC ATTTGGCACT  
5651 TGATTGCCAT CATGACACCA CTAATCTGCC TTCCAGTGGA GTTGCTCTGA  
5701 CTTTGTGCAC AGTTATTCCC AAAGGTAGGG GTGACAGTAG TCTTTTCTA  
5751 GCCAGGGGAT GGAGGAGGGA AGAGAGTGAG GAGTGAGGTG GCATATCTCT  
5801 TATCTGTATA GAATTATGTG CTAGGTGCTC TTCTAATGTT TTACATGTGT  
5851 TAATTTAATC TTCACAAACA TTTTAGGAGA AAGGTATTAT CCTAATTTTA  
5901 CAGATGAGTT AACTGAGGAA CAGAGAGTTT GAGTAACTTG CCCAAGGTTG  
5951 CACAGCTAGT AGGACAAGAT TAGAATCTGG GCTCTTAAAC ACTCTTCAAG  
6001 TCTGTGTTTC TTATTGGGAC TTTTGGCTTT TGCCTGGTAA GGTTCCCAAA  
6051 GCTCAGGAAG TGGAGAAGCT TGTTGCGAGG AGGAAAAGGA GAAGAGAGAG  
6101 GATGAAGAGG AAAAGGGAAT GGAATAGGAG GAGGATAAAA GAGAGGAAGA  
6151 GAGAGGAGGA AGGAGAAGAG GAGACAGTGG CTCAAGCTTA CCCTACTTGT  
6201 TCCTTTCTCT ACTAACCTAT TCAGACAATA ATCTTTTCAT TTCCATGTCT  
6251 GATGGGCAAG TCAGTACTA CTGGACAGAG TTTGGGTCTC TGTTTTGGAG

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6301 GTTCTGGATT ACACAGACCA AATGTGTTTA GCAGGGAAAA GATGAAGGGG  
6351 AGCCCAGCAG TATTAGGGGA AAGTGGAGAG ACAGTTCACA TTACTTGGAC  
6401 TGTAGGATAT GTCATCAAC AGACATGACC CTTAGGCGG AGGTGCTCTC  
6451 ATGGGTTCCTG GAAGGCAGTT GTAATTATAA TGTTTTTCTT ACAGCCTTAT  
6501 TACCCTACAA TTTAATAGCA AAAAATGAAG GTGGTTTGAG AATAGATTGG  
6551 TTTGGATAGC ATTTGGGTGG ATTAAGCAAA GCATTGTCAA GAGGTGTAGG  
6601 TAAAAACAAG ACCCAAATAT AAAATGGTTC ATCTCTGGTG AGCTATGGCC  
6651 TTCCTTCATA TCCATGGAAC AGAGACTTCT ACGAAGAGCG TTACTGTTTG  
6701 TGTAGGACCT ACCACAAGTA GATTGGTTCT AAGTCTTAGC TTTCATAGCA  
6751 GAATTTACGT GCATTTTAA TCAATCAGCAT CATTTGTGA TGATTTTCTG  
6801 CTTAAATTTG GTATTTACTT GCTGCTTATG TGTATTAGA TCTTTTAAAA  
6851 ACCAGTGAGA TCTGCAAATA GTATTCCTCT CACTAGAGGC AAGCAGATGA  
6901 ATACAGTGTA AAAAACTTT GGATTTGGGG GCAAAATAAT TAGGTTCTAA  
6951 AAGCAGCTGT AGCAATACTT AGTGGTATGA CTTTGGGCTG CTCATTTAGC  
7001 TTTTCTGGGT TTCGCTTCCC TTCCATGGAG AAAGGAGTCA TTGCCTTTGT  
7051 CTACCTCTCT GACTTTGTCT CTTCAACTTT CCCCATCTTG ATCTGATCTT  
7101 GGGGCCAGTT GCCTTCTTTT CATTCCTCAA ATAGATCACA CTTGCATCTG  
7151 TCTGAGGGCC TTTGCGCTTG GAATTCAC CACTAGAGGC AAGCAGATGA  
7201 TAGTTGGCTC CTTTCTGTCA TTTGAATCTC AGCTCAGATG TCCTCTTGTT  
7251 AGCAAGGGAT TCCCTGTCTT ATCTGAAAGA CCTCTCCTCC TGTTCCTCAG  
7301 CACCATCATT TTCTCTGTG TCACCTATTC GATTGTCTTA CTGGCACTTG  
7351 TCATGATTTG AAACCATCTC ACTTACTCAT GGGTGACATT TGATGCCAGC  
7401 CTCCTTTACT AGCATATGAG GTGCATGAGC AGGGACTTTC TCTGTCTTGT  
7451 TTATTGCCAT AATCCAGTG CCCTGGAAAG TGCTTATAAT GCATTTACAG  
7501 TTTGCTGAAT GAATGGAAGG TTGGCAGGAT GGACTGGAGA GGACTGAAGG  
7551 CTTTATGCCT CATGGAATTT GCAGGACGCC TCTCAGCTAT AAATGGCAAA  
7601 GTACAAATAA GGAGAAAGGA AGAATATCCC CAAATAGTGG CATATCAGAA  
7651 AGGACGCTGA TATTCCTTCC TCTTTCGCTC TTTGACCAGA AGTAAGAAGG  
7701 CCAGTGCCT GTTTTCTTCC TTTTCTCGTC TTTGACCAGA AGTAAGAAGG  
7751 CTGAATAGAA GTGCAGTGAG GGTGGATGGG TGGACTGATC TAGCCTGCTG  
7801 AAGATATGGT CAGTGTCCTA TAAATAATTT GGCTCATATT AGCTATTGGA  
7851 GTGTGGCTAT TTTTAGGCAC TTTAATCCAC TTAAGAAAGA AGCAAAGCTC  
7901 TAGGAGTGGA GGTGGATTTT TTTTAAATG CTACACTTTT AGTGCACACT  
7951 TTAATGCAAA ATTCTGGAGA AGCCCATACC TTATGTGCAT AGCACCTTTC  
8001 AGTTTACAGA AACTTTTFTA GGAATGATCT CATTTGTACT TTAATAAACCT  
8051 CTATTTTGTG AGGGATTAGA GTCTTAGATT TACTGACAAA TAAAGCAAGA  
8101 TGTAAGAAAG GTCAATGATT TATGTGGGAG CCCAAAGCAA CAAACAGGCA  
8151 GAGCTGGGGC TACCCTAGGC CTTTGTGATC TTACGTCCAT GACAGTTTCC  
8201 TTCAAGCTTT CTTTCTTCCC AGCGACTTTG TTCATTCCAC ACTCTCCTGC  
8251 TCTTTGTGAC CCAAAAGTGT GTTCAAAGGT TTCTCTGAGA GATTTAGAGG  
8301 AAGCAGTCTC CTTGTTGATC AGTGAATCTT TAGTTGATGG CTATTTTCAG  
8351 CAGGTTGTGC TTATTGTACA GGTCTACACT TTCATTCTAT GAGCTCAGGT  
8401 GAAGACCTTT AGATCTTCTT TCTGCTGTAC TGGCTAAAAG AAGATTTTGG  
8451 TCTTTTGTGA ATGGGGGCCA TTTTCAACTT GCTAGGTTGC TTAAGTGCTA  
8501 GCTTTATTAA CGTGTTTCCA AACACACATT TGTGGAGCTT AGATTTCTCTG  
8551 GAAAGAAAT AATCTATTTT TGATTTAATA TCCAATTTTC AGGAGATCAG  
8601 TGTTCCAAAT GGGATTTAAA ATGTGCCAAA ATCACCACAA TTATCTCAA  
8651 AAGTACCAAG GAACAGTGTT CCAAAGACTG TCTTGCCAA GATTTGGTTC  
8701 AGGCTTCTTT TCCAGCAGTG TCTAAGGAGC TTCACCATCC TTTTGTCTAA  
8751 TCCCAGTGAT CACTGGGTTG AATTAAGACT GAGCAGGTTG ACTTTGCTGT  
8801 TCCACACCAT TTCCAAACA TCTGTACTTT GGCTCCATAT GAACCCACC  
8851 TTAAATCTGA TGCATTTAAA AAATATAATA TAGTCTTCC CCTCATTAGG  
8901 AAACCTCAAC CACAACGAG ATATGGTGTG AAGTATATTT AATATAGGCA  
8951 CAGTGAGCTA GTGATTTCTT TTTGACTTTT AGTCTACAGG AAATTAGAGG  
9001 AAGAGTTTAA TGATAAAATG GAAAGAAGCC ATTCTACTGA TAGCCAGTTA  
9051 GGAAGTTTCA CTTTGGACAG CTCCCTTGGC TGATGCAGAA AGGTGGATAA  
9101 AAATGACAAAT CTTTTTCTGT ACTCTGATTC TTATAAAGGG CACCTACTGG  
9151 ATGATCCAGA TGAGGTTAGA GTGAGTTAGG GGCTTAGCTC TACATGGCAT  
9201 GTTTACAGAA TCTACCTAAC CGTGGCACTA GGAGTGTGGT CACCCTGTTG  
9251 GTTCCACCCA CCTGGGTGAT TTCTCTCCAT AAGAATCATG GAGGTCAAAG  
9301 GGACCTTCCA CTTCTGGGGT CTGGTCTTAG GGGTACTCTC AGCGGAGACT  
9351 TTACAGTTTA TCTATGTCTG GCTCATTACC ATCACCACA ATGGGGAAAT  
9401 AAAGACCTCA TATTTACTTG CTAGAACATC TATTTGTCTT TTGCAGCCAC

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9451 AGTTTAAAGAG TTTTTTTTTT CTCCCTGTGA GTGTCTAGGA CTGAGTACTC  
 9501 TGAATTGAAA ATGAAACCTG ACTTCCTAAT CCTCCATTTA GGGTTGAAGG  
 9551 GAGGGAGTAA GGGTCATAAT CACTGGCAGG GGAGGGCAGG GTCATGAGGG  
 9601 AGCATTGCAT TCTTTTCTT TGCCATTCCC AGAGCCAGGG AGATGGGGAG  
 9651 GGGTGGGCAT TGGAGGTAGT GGGGATGAGG CTGGGAGATG GATGGGATTT  
 9701 CAGGAGATTT TAGGTTTTGT ATTACCAATA ACTGCTAGTC TCATCACTTA  
 9751 CCCTTTCCAT GGAAGTAACT TTGAAGCAGA GTGGAATGGT GGGGAAACAA  
 9801 GATTAGAAAG GAAAACATAG GATT'TACTGC CATAcataag CCAGGTGATC  
 9851 ACAGGGAAC TTTCCCTTCAT TCCTCCCGTC CTTCTTTTCT TCATTCCCTT  
 9901 GTTCCCTCCC CACCGCCATC CCCCCAAATC CTGCAGAGTC TTGATCTCAA  
 9951 TTGCTCTCGC TTGTGCAAAG GGTCCCTTCT CCCTTACTCA ACTACCCAGT  
 10001 GTGGTGGGGC TGGTGGTATT TACAGTTTAA AAAGAGTTGC TTGAATAGAA  
 10051 AATGAAAATT TGGTCGGGTG ATGGAGAGCC TGGAGTCAC GGTAACCTTT  
 10101 GCAGACGCCT AAAACACCAA TATTCATAAT TTTGACATGC AAGCTAGCAA  
 10151 CAATTTTACT ACCAAGAAAA TGAGTTTCTT ATGTGCAAGC AGAACTCGAG  
 10201 ATCCCCTAAA TAATCACACA CCAAATATTT AGCATGATAA AGATAAATAG  
 10251 TATAGCTTAC TAAATTTAAT GTGATATGAG CCTGACAGGC AGAATAGAGA  
 10301 TGCTTGATAT TAGGTGTGAT AAAAGGTTTG ACATCCAACA TTCACTTACT  
 10351 TCGTCCTCTG AGACAAAAGT CAGGCACCAA GTGTTTAAAG AAAATTGATG  
 10401 GGAGGAAAAG CTTAGAGATG AATAAAGTCT ATTTATTAAT TTATATTTTC  
 10451 CTCTGAGAAC TGGGGAGTGT TGTTACCCAT GTTAACGTG GACTAACCTG  
 10501 GGCCAGCTCC TGGATTCTAC TGGCTAAGAA TGTTGCTTTA GGCCAAAGGA  
 10551 ATTTATCCCT CATGGTGGAA TTTGAGGCCA TATGGGAGGT GATTATGATA  
 10601 GATCTGTTTC GGCCTCTACA TTCTTACAAT AACCTGAAAG GAGATTAAAT  
 10651 ACATGTTATA GTCATTTAAC CTAGACTCCA GGCAAAATGT CACCCTCTGT  
 10701 ACAGTATAGG AGCTTAGGAT AGGAGACCTG GTTTCTAGGG CTGGCGCTGC  
 10751 CACTCATTTA GAAAAGGAGG GAGTTGAGTT GTTGGTTGTT GAGATCCCTT  
 10801 CCTTCCCTGA TAGTCTTAGA TTGCCTGAGT CCTAATCCAA GCATGATTTA  
 10851 CTAGAGGCTG ATTTGGGAAC ATTGCTTCAT TTTTCTGTGA CTTGGTATCT  
 10901 TCATCTGCAA GATAGGGATA ATTACAGCCA TTACTTCTTT GGT'TTGTAT  
 10951 GTGGATTACA TAAAGTGATA CATGCAAAGC TCTTAGAAGA ATGCCGGATC  
 11001 ATCATGAAGG CTCCATGAGT GGTACCTGCC TTGTGCTGTT CTCACAGTTG  
 11051 CAGGAGGCAG CCTGTGAAGT CAGGGTAGCC TCCAGCTCAG CCTCTTGAA  
 11101 GCATCTGGTT CACTGTCTGG ATCATCCAGG AAGTGGTCCA TAGCAGAGCA  
 11151 CAACCTCCTT GATACTCTGG AAGACTCTTA GTATTCCTAG TTCAGATGTA  
 11201 AACAACTTAG GCTGTCTTGG TTAACCTAGA GAAAAGACCA GTGAAAGAAC  
 11251 ATGGCTTGGA ATCACAATAT TTGAGTCTGA GTTAATGTAC CCATTTTATT  
 11301 AGCAGTGTAT CATAGTTGAT TTCGGCTGCT TTAATAAAAT TCCATAAACT  
 11351 AGATAGATTA TAGACAACAG AAATTTATTT CTCACTGTTC TGGAGGCTGG  
 11401 GAGGTCCAAG ATCAAGGCAC TGGTAGATTT GGCATCTGGT GAGGGCCAC  
 11451 TTTTCAGCTC ATAGATGGTG CTTTCTTGCT GTGTCCTTAC ACGGTAGAAA  
 11501 AAGTGATGGG TCTTCTTGG GCTTCTTTGA TAAGTGCACG AATCCTAATC  
 11551 ATGAAGGCTC CATGCCATG ACCTAATTAC CTTCCAAAGG CCCCATCTCC  
 11601 TAATAACATT ACCTTTGGGG TTAGGATTTT AACATATGAA TTCTGGGGGG  
 11651 ACACATTGAG ACCATAACAC TGTGTGAAGT TGGCCAAGTC ACCTAACCTT  
 11701 TCCTAGCATT AGTTTTCTTT TGGGTAAAAT AAAGATCACA ATAACAACCA  
 11751 CTTACAGTGT GCTGAGATGA TCAAATGAGA CAAATGTGAA TAAACTTCAT  
 11801 AAAGTGTAA ATTCCAGACC AACATTTCCC AAAATGTGTT CTGTGAGACA  
 11851 TAAGCTAGAC TCATCAGATA CTCTGAGAAG AAAAGTGGTG TCATGGTAAA  
 11901 GTCAGTTTGC AGGATGATAC GTGCTCAGTC ATTCCTAGAG AGTCATCATG  
 11951 CACGTTAGCA TGTTACTGTA TTATTGTGTA ACAAATAACC CCAACATTTA  
 12001 GTGGCTTAAA TCAATATAAA CATTATATTAT CTCATAAGTT CTGTGGATCA  
 12051 ATAATTCAGG GATAGTTTAA TTGGGTGGTC TGACTAGGAG TCTGTCATTG  
 12101 ATTGTGGTCA GATGTTGTCC GGGCTGCTGT CATCTGATGG CTTGACTGGG  
 12151 GCAGGAGGAT CTGTTTCCAA GATGGTGTGC TCATGTGGCT TGCAAATTGC  
 12201 TGCTGGTTGT TGGGGAGAGG GCTCATTTCC TGCCAATGTG GGCCTGTCCA  
 12251 TGGGATGCTT ATGTGACTC ATATGTGACA TGGTGGCTGG CTTCCCCAAG  
 12301 AACAAGTGAT TCAAGAGAGA ACAAGGTGGA ATTGGCAACA CTTTTTATGA  
 12351 CTTAACTTCA AAAATCACAT ATTGTTACCA CCACCACGTT CTTTTCATTA  
 12401 GACGCCAGTC ACTAAAGTTA GTCCACATCT GGGGAGTGGT GGGGGTGATC  
 12451 ACATTCACGT TGGAAGGGAG ACATGTCAAA GAATTTGAAG ACATATTGAA  
 12501 AAATCACCGT AAGAATTTT TCCTATCATT TATTGAATAG GCACCACGTG  
 12551 CTAGGCTAAA TGCTTTGTAG TTATTATCTC ATATAATCCT ATTCATAATC

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12601 CAAAGAAATA GGTGAAATTA TTATCTCTGC TTTCTGAATG AGGAGGCTGA  
12651 GGCCTATAGA GCTTAAAGTAA CTTGCCCAA GTTACCTAGT CATGCTACGA  
12701 CTTGAACCCG AGTCTGTCTG ATTTAAAGCC TGAACCTCTTA CCTCTGCCCTC  
12751 ATATGCCCTCT CTCTGATAAT CCTGTAGTTC AGAAGTCTGT TTAATTTTGT  
12801 TTAAGCCTGC ATTTTCTACT TAACCACAGA ATGATGATTC ATTTAACTCC  
12851 ATTTTTACCC TTTCATTAC CAACGGCTTG AAACATTATT CTAGAAAGAC  
12901 AGTGAGCATG ATGATGATTT ATGTATAATA TGAACATATG GTCTCATAAT  
12951 AGATCCGAGC ATACCTATCA GTCCAACTT TTTGTATTAT TCAAATACTG  
13001 GAAGTGCTA TTTTGCCTGT CTTGTGTGGG CACCATCTAT GTGTAAATCT  
13051 GTAAACATTA ATTTAAAAA AAGACCCCAT AATCCACCCT ATTTTCTCTG  
13101 ACTGTGAAAC TTAGAGTGGG GTGTGATAAC TCATGGTCCC ACTTCTCTTA  
13151 CAGAGTCCCT TTCTTTGCAA TGTCCCTTCT TTTACAGATT CAGTGACTGA  
13201 CAACTTAACT TTCTTGGGTA AAGCCAGAAA AAACAGGATG GCCTCCAGGC  
13251 CGAGCAGTAG AAATGTGGG GAATGGGGTG TCTGGTGTGT GTCTGGTGTG  
13301 TTCCTGCAGT GCCTGCAGGC CATGTGTCTG TATGGTGAAT GAAACGCAAG  
13351 TCGGCATCCA GCCAGGATGG CAGGGACCGT GTGCCTGGGG GTGACGGCAA  
13401 ACACACAGTG AGAAGCTGCT GATGGAGGGA GGACCGTAG CACTCCTTGT  
13451 CATATTTTGA GTAAACATTT TTTTACAATC TTGTTGCTTT TTCTGTACAG  
13501 TCTTGAGAAA ATGATTTCCT GGAAGCAGGA TGCATCCAAT GACTTAGAGG  
13551 TTCCCATGTT TCCAAACATT ACATGCCTGG CTTATTCTCT AGGCAGTTTT  
13601 GTATTCGAAA GGAAGTTTGG GAGCTTCTGT GTTCTGGGCA GAGGCGAGTG  
13651 AATATGGTTT CTTTGTAGTA GCACCGTGG CTTGAGAATG ATCAGGAGCT  
13701 GGACATTGTT GAATATGTCA CTTACTGCAC AAAATGGCAA AGACAGGGTC  
13751 TGGGACAGGG TGAGAGTGTG TTGAATGGAG ATGCCTGGGG CCCCAGTCAC  
13801 ATTCAGGAGC CAGCACTGAT GGCATCTGTA ACCATAGTAA CCAAGAGTGG  
13851 AAAAAGTCTC AGGATGCCAA GACGCCACTG TGCCCCCTT CTGGTTCTGT  
13901 TGTTTTCCCC TCTATTCTTT CATCCAGAAA TTCCCCATC CCTGCCCCCA  
13951 ACCACCCTGA CAAGGGACTG ACTTTCAGGG TGGTTTCTAC ACTGGTGATT  
14001 TTAACCTCCT ACTAATCAA CACTTCCTGT AGCCCCTTT TCAGTTCTGA  
14051 GATCCAGCTT GATTCAATAT GATCCAGACT AAGCCTCATG CACCTAATTT  
14101 CTTCCGCTTT TCCATTTTTA CTGTGAAAAT TGGTCTTAAG TCCTGTAGTA  
14151 TACATACTCT AGACTTATTT ACAGCTGGGC ATAACAACGG TGGCTCATGG  
14201 CACTCAAAGT TTCCAGTAAC ACTCCTGCAC TCACAGTCTG GTATAGATCA  
14251 TGAGATTTTT TTAGATGTGT TTTAAATGAA CAGAGAAAGG CAATGAGGCA  
14301 CAGGAAAGAG AGCCGTGGTC TCTTGTGTTG AGATGTGGGT TTTGCTACTG  
14351 GTTGGAAAGT GAGGTGTGGC ATGGCGCATG AGGGTGGGGA GAGGTGGGTG  
14401 ATGCTCAGGT CATGTAGGGC ATAGTAGGTC TTACTTACTA AGGAACTCTT  
14451 TTTTCTGAG AATAACAGGA ATGTCTTGAT TGATTTGAAG TGGGAGGATG  
14501 ACACAATCAG ATTTTAAAA GATTATTTAA ATCGCTAATA AATCAAATGA  
14551 TGGGTTACAG GAATGTTTGC AGAGGATACT TACTGTGTGA CAGGCATAGT  
14601 GCTGGCCTTA CCTGGGGTAT CTGTGTATTC TTGTAGGAAT CCTACATAAA  
14651 AGCTGTTAAA ATATTTTAA ACAGAAAAAGC TTTTCTTGAC ATCTTTGAAT  
14701 TATGACAACC AATTCAAAC TTCTGGTTGC AAATGGGAGG TGTATCTTAA  
14751 AGCAATGGCG ATTGCATTTT CAATTTCTGT TCATTTAAAT GATATTTTCC  
14801 CTGGCTTTGT TACATGACCC TTGATTCTGT GATAATTTGC ATATCTAGAG  
14851 TCGATGAATC AATACATGCA AAAGTGTGGT GCGCTCGCTC ATATTCTGTT  
14901 ATACTTCAGA CGCCTTTTGG AAGCATGTGG CTCTCAGTTC AGCATAATGC  
14951 TCCTGATAAA ATTGCCCCCT CCATACCCGC CGTCACTTTG TTCTGGTGTG  
15001 GTCCAGAGGT ATTGTAACAT TGGGGTATTT CTCCTTTGAC TCTAATGGGA  
15051 CCCCCTGCTA GTTGTGTTCT TGTGGCCTCA GCTTGAAGG CCTCCCAAAA  
15101 GCCTGAATTA ATGAAAGCTT CTGATGTGCC GATCCCTTTC TCTGGCAGGG  
15151 TGAGAACGCA GTTTCTATAG GAGCGTGAAT GCCTGCTGCT CAGGCAATAA  
15201 TCTCTGCATT CAGCCTCAGT ACTAAAGACA GGCAGAGCAG ACAGCCACAG  
15251 GGGGTGGGAT TTGAGGAGCC CTATAAAGTC CCTCTCCACA GCTGACACAC  
15301 ACCACTCCTT CCCATGACTA TCAGGATGCC TACAATCTTA ACAGTTACTT  
15351 TATTCTATGG CTGTTGTCAC TCATCCATCT GGTTATTCCA TAAACACTTA  
15401 GCGAGTGAAT GCCTGCAGAA ATGGGGCTAG GCATTGGACA CAGAAAGATG  
15451 AAAAAGACCT GAGGCGTGTA CCCAGAGAAG TCACAGCCTA GCCACTGAGA  
15501 ACAGGTGCAT CATCAAGTAA TTATGATATA CCATGATAAA TGCATATCAT  
15551 TTATATGGTA TATGATATAC CATATGATAT GGGATATGAT ATACCATATG  
15601 ATATGGTATA TCATATACCA TATGATATGG TATATGAGAG AGATATGGAT  
15651 TAAAACATCA GCTCCAGAAC ACATCTTGTT AACATGCGAA TGAGTTTCTT  
15701 CAGGGTAACA AACTAATTTT CAATTACCCG TGGGTACAGC CAAATTAATA

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15751 GTTCCTATGA GAGAACTGGA CCAAGCAGAG AACAGCAACT AGGGACTGAT  
15801 ATGTATTGAT AGGCTGGTGT CAAGTGGGAA GGGGGGAAGT CAGGTGCTGT  
15851 GTAGGAGCA GACTGAGAGC TCTGGAGGGC AGGAGTGCCA GGAAGGTCAC  
15901 TGAAAGCAAC TTTTCATTGT TGCAAATGTT GTCAGAGGTT GCTCTGCTCA  
15951 TGTAAACTC ACTTTATAAA GTGGAAGGAA CTTTAAAGAT ATCCAAGTCC  
16001 ATTGAGGCTT CTTAGGGCAA TACTGAATCT AGATTGGTGA AGTGACTTGT  
16051 GCTTGCCAG ACAGCAAAAA GAGGACAAAG CATATCTATG AACCCGTAAT  
16101 GCTAACCTTC ATTATTCAAC AGTGATGCTT ATGGCAATGC CAACGGGTGT  
16151 TGGGGCCTTT TATTAATTTT TAATTTTAGT TTTTATGTT TTTGAGACAA  
16201 GATCTTGATT TGTCGCCCGA GCTGGAGTGC AGCGGTGCAA TCACAGCTCA  
16251 CTGCAGCCTC GATCTCCTGG GCTCAATCAA TCCTCCCACC TCAGCCTCCT  
16301 GAGTAGCTGG GACTATAGGC ATGTGCCCCC AGACTTGCCA AATTTATGCA  
16351 TTTTTTGTAG AGACAGGATT TTGCCATGTT GCCCAGGCTG GTCTCGAACT  
16401 CCTGAGCTCA AGCAATCCGC CTACCTTGGC TTCCCAAAGT GCTGGAATTA  
16451 CTGGTGTGAG CCACCGTGCC CTGCCTGCTT GAGCCTTTTT GCTATTCTCC  
16501 CTCCTATGGG AAAAAGAATC GAGAAAGAGC AGTAGGCTCT ACTAGAGTCT  
16551 GGAGCATATC GGTTCTGAGA TTTTCAGATTA AATTCTCTAT GTCTGCAGCA  
16601 AGTACAAATG TGAGTGTATA TTCAGCCTCT TGAAGAAGAC ATCTATCCAT  
16651 TTCTTCAGTG AATATTTGCC CGGAGTCTTC TTCGTGACAG GCACTGTTGT  
16701 AGGCCCTGGA GGTACAGCAA TAAACAAGAC GAAGTCTCTG CCCTCCTGAA  
16751 ACTAACCGTT TAGCCAAGGC TTAGCATCTC TCACACTCAG GTCAACTTCT  
16801 GCATTTTAGA AATCTGTTTC AGGCACGCAT TTGACAAGTA AAGAGGTTCC  
16851 AAAAAATACAT TAATAAGGAT GAAAATGAGG CCATTCTGAT ATTCCATTGC  
16901 TTGGCAAAAA TGCTTAATAT GGAATTTAA TATGGAATGG GTGCTGATGC  
16951 TGTCAAAGGT GGTGACATTC TGTTAGAAAA TTCAGTGATT TCAAAGAAGG  
17001 CCTCAGAGCT GCCTAGTTTG TAATTAGATA TTTTGAAGAA TCTGTGTTAA  
17051 TTAGGACTCT GTGGCTGTG CATGTATACT GGGACGAGAC TGGAGTTTGT  
17101 GTCTCTCCCA TGATGATGGC ATGTAAATTA ATCTCCAAGG AATTGCAAGA  
17151 TGCTGAAATG TGAGGTACTT GAGTACACGT TGCATGAGTG CACACAAGTG  
17201 TGCCCTGTGCC GGGATGCGTG TGCACGCGTG CACACACATA CACTCTAGCA  
17251 GATAGTAACT TTTTGCTACA CGTGATTTC AAAGTGCTA AATTTACATG  
17301 TCTTTTGAGT AGGAGGAAAT TAGGACTTTT GTCTGTTATA TGCCTTGACG  
17351 TCTCTTGCCC TTCTCTGGGC TGCTGGGGCA GAATGAGGCC AACAGAGAAC  
17401 CACGGATGCC AGTCTGGGTC ACAAGGGCTT AAGGAAGCAG CAGATGGTTG  
17451 GACTGACTGG GGTGTCCATT AAGAATCCAG GGGTAGTGAG AGTCTTACCT  
17501 GGAGTTTGAG CGCCACTTC CATTGCCAGG ACTCTCAGT GAGTGGCTGG  
17551 AAGAGACCTG TAGGAGCCAT CCTTCCAGTA TCTATCAGAG GTTTCTGCAC  
17601 TGTTTTAAGC TCGTCCTAGT GATCGAGGGA ACCTTGACTG GGGGTGCTGA  
17651 TGATTATTAA CAGTGGCCAT ACTCCCACGG CTGCAGGTGG AGATGAAGTG  
17701 TTTGATGAGA AGATGAGCAA GAGCTCAGGT GTGCCCCACC AGCTCTGCCA  
17751 CTCCCAAGCT GCCGAACCTA GGCCTAATC TACCTCTCTG TGTCTGCTTC  
17801 CCAACTTGAG AACCGGAAAT GATAAAAGTA CCTGCTCCCT AGGGAGTAGG  
17851 TATGGTTAAA TGAGACCTCT TAAATGAGAC CATGCACACG AAGAGCAGAG  
17901 CACAGTGCCT GGCACACAGG AGGCACCTAA TAAACATCAA TGATGCTGCT  
17951 GCTGGTAACA CCCATTGCT GAGGGTCTTC AGTGGCTCAG GCACAGTACT  
18001 CAGTGCTTAA CATATAATAT GTAATTTATT CTTCACAGTA GCCTGAGTCA  
18051 CTTGCTTGTT CTTCTGGTTA ATATCCTAAT GTTTAGCTCA CCAACTTAGA  
18101 TGCTCATGAC TTCCAAAGGA TCTTCATGTA ACAAGGACTC CATATCTATT  
18151 TTTAAAAAAT AAGAGCTTAA TTAAGATATA ATTTACATAC CATAAAATTA  
18201 CCTATTTAAA ATGTACAATT CAGTGGTTTT TAGTATATTC ACAGAGTTGT  
18251 GCAATCATCA TCACTATCTA ATTGTAGAAA ATTTTCATGA CTCCAAAAAG  
18301 AACTCCATA TCCATTAGCA GTCCTCCCC ATTTTATCTC TCCAGTCCC  
18351 TGGCAAGCAT GAATTTACTT TCTGTCTCTA TGGAGTTGCC TATTTTGGGC  
18401 ATTTTATGTA AATGGCATCA TACAACAGGT AGATATTTGT GTGTGTGTGT  
18451 GTGTGTGTGT GTGTGTGTGT GTGATCAGCT TCTTTCACGT AACATAATGC  
18501 TTTCAAGGTT TCACTCATGT GGCATCCATA CCTATTTTGA ATGAAGAATG  
18551 AAGACAGTCA TCTGAGACAG TTGTATTAGT CCATTTGGAA GATGAGGAAA  
18601 CTGAGGCTGA GAGTGTGTAT GTAATTTGCT CATGGCCACC CATCTTGAAA  
18651 GCGCTTGAGC TGGGATTTGT GCTCAGGTCC ATCTTGGCTC CAAGGCAAGA  
18701 CCTTGGCCTT CTCATCCACT CACTGGTCTC TGGTTGGACC TCTGCATCAT  
18751 GCTGAACACC ATTTCTATAG AGATGGGTGT GTCCCACTGG GTGTGGACAT  
18801 CCTGAGGAAT TGCTGTGGTT GCAAGAACTC TGATATTTTC CATCTACCTT  
18851 GAGGGGGATA TGTTTTCATG TCTGTATACT CACATAGTGT TGACCAGTCT

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18901 AATTCTTTTG TCCATTTCCT AAGGGTTATG ATATGAACTT GGAAAGTTAC  
18951 AGAAATGAAA GTGATAGGAG AGATATACTT TCTGGGTGG AAACCCAGCA  
19001 ACCAGTCACT CAATATGATG GAGGAAATGT CATCCTTCTT GTGTGTCTT  
19051 CAATAATAGA TTGTAATGAA AACTATGGT GTCTTAGTTG GCTCCCTCC  
19101 TGCCCCGTGC CCCCCTCCCC AGCCCCAGTG CTTTCTGGA GACATGAGAT  
19151 GGTGTATCCC TTCTCAGTT GCTGTGATAG CAGTGGGGAT GATGGGGACA  
19201 GGTATTCATG GAAGGAAAAG GCATGGTACC AGCAGGCTCT TGGGCAGGGA  
19251 TGTGTGTCTT CACTTGATCA TCAGGGAATG AGCTATCATG ATGACAGAGC  
19301 ACATCCTATG AAGTACAAAT CTTCCCCAC ATTTCCCCAA AATTACTTTT  
19351 CTCCTGCTCT GTTCTCTCAC ATGCTATTCT AGGAAAAGG TCCCATTTTA  
19401 TCATTAAAAAT GCAAATGAGA TTTCCATCTT GCTTCTACCA AAGAAGGAGG  
19451 AAAATAACCT ATATAAACAC CATGAAACCT TACTTTGACT TAAACTAGT  
19501 GGAAATGGC CCCTGAATCA GATAATTAGC TGAAAGTACA TGAACAATTT  
19551 AGGCCTCCCG TAGTGGTTAT GTGCTTGTG TATAGGAATT TCGTCTACCA  
19601 TGGATTTCAT GGAAGTGGCC CCATTCCTGC TCTGGGTTTA TGTAAGACTT  
19651 TCAGCAGCAG CCCAGTCTGA TGTAGCAGAT GTTCCAGTGC CTGTCCCTAT  
19701 CCTCCTGCTC GCACCACTTC AGCTCATGCT GGCTCACTTC TGACTGCCAA  
19751 CTTGGCATT TTTTTCCTT TTTCTTGACT GAGCCTACTT TGCTGCTCCC  
19801 ATGGAAGGCA GGAAGTGTG GGAATTAGT GGACCCAGG AGGAGCCCTC  
19851 AACCAATAAC TGATGGAAGA TGGTGCCTAA ACACCCAAT TCCCTCAGCC  
19901 TTGGGTAGGG TAACTCAGGA ATATGGTTA CATGGGTCC CAGTTTCTC  
19951 TGTAGGAAAA ATTCCACTGG GCGACAGCAG TAGCTAGTTA GAAACTTCAC  
20001 CTTTTATTG TTTTCTGGC TGCCTTCCCA GCCCTTCTC TTTTCTCTAA  
20051 TTCCCTACTG CGGATTCTT CACTTCCAA ACAAAACCACT TGTGCTCAAA  
20101 TCGTAATTGT AGGATCAGCT TCTGGGGAAA CCCAAATGAA GACATATGGT  
20151 AAAGCTTCCC TCTTTCTTG CTTTCTGCC TTTTGCCCA ATCAGTTAGC  
20201 TTTGATGGTG GGAGTGAGGG GATGCTCAAC CTCTCAGGCA GGCTAATGGC  
20251 TCTCAGGAGA CACAATCCAC AGCTGATTGG CAGTTTCTC CCCAAGATAT  
20301 CTTCAGAACA AACCTGGTG CTGGTGAGTG ATCCATGCAG CATGAAAAGA  
20351 GAGGTGAAG CTTGATGAG CATGTTCCAG TCTCATCAA CTATTTGTGTT  
20401 TCCATAATTT TCCTTCTCAG AAAAGGCGAG AATCAAGTAC AGTTGATTCT  
20451 CATCATTTAT GGTAATTCTT GTGTTTTATA AAGTTGCTGT AAATCCTGAA  
20501 TTAGCAAATA GTGAACCGTT GCTTTTAGGG GAAATATACG GTTAGGTTCC  
20551 TGTGAGCCTC TAGTCAACAAC ATTTTCTTCT TCTTCTCTT CTTTTTTTTT  
20601 TCGAGCTTAG GGTCTTGTT TATCACCAG GTGGGAGTGC AGTGGCGCGA  
20651 TCTTGCTCA CTGCAACCTC CACATCCCAG GTTCAAGCGA TTCTCCCACT  
20701 TCAGCCTACC GATGAGCTGG GACTACAGGC ATGCACCACC ATATCCGGCT  
20751 AACTTTTGTA TTTTGTGTA GAGGTGGGGT TTCACCACAT TGGCCAGGCT  
20801 TGTCTCAAAC TCCTGACGTC AGGTGATCTG CCTGCCTCGG CCTCCCAAAG  
20851 TGCTAGGATT ATAGGCATGA GCCATCACAC CTGGTCAGGT CACATTTTCA  
20901 TCAACTAAAT ACATAACCTT GTTGATATGT TGTTTCTGTT TAAAGACATC  
20951 TTATTTTCA TATACTGTTG ATTTGTTAGC ATTGAACTCA CAGCCACAGC  
21001 ACTGTGACTC ATTTCTGAAC AAAGTTATCT AACACACATA TTTTCTCCAT  
21051 AAGGCACCTC GCATCTTGCA CTTAGGAACA CTGGATAGCA CTTCAGCATT  
21101 GCACTTGGGG GTGATTTTAA ACAGTGCAAA CACTAACAAA AAAGCACAAA  
21151 ATGTGAAAAA CATGGCACTA AATAGATCAC AGAATGGACA CTAGCTTACA  
21201 GCATGAGCGC TCGAACAAGA AGGCAGAGCG CTGCCTTGTT CAACCTCAGC  
21251 TGAGGACATG TGCATCGGGT GACTCAAAC TTTTCACTG CTGTGTGCAT  
21301 GACTGCGAAT GACTGCAGAA CACCATGAAT ATTGATTGA TTTCGGGGTT  
21351 ACAAATAAAT TTTAACACGT AGAAGAATTT GCAAATATAT ATTCAGTGAA  
21401 TAATGAGGGT CAGTTGTCTT TCTTACTTCA TTACAATAAG ACTCTACTTC  
21451 AATTCAGTAT TTTTATTTCA TTTTATTTG TTTTGTAGAG ATAGGGTCTT  
21501 GCTCTGTCAC CCAGGCTGGA GTGCAGTGGT GTGATCCTAG CTCACTGCAG  
21551 CCTCAAACCT CTGGGCTCAA GTGATCCTCC CGCCCCAGCC TCCCAAATAG  
21601 CTAGGACTAC AGGAACATGC CACCACACCT GGCTAATTTA TTTATTTTTT  
21651 TGTGGAGACG GCCTCCCTAT GTTGCCAGG CTGGTCTCCA ACTCCTGTTT  
21701 TCAAGCCATC CCCCCTTCTA CTCTCCCAA GTACAATTTA GTATATTTAT  
21751 TAAACGTGTG TTCCAGGCTT TTTGATTGCT ATTGAGATGC TAATGAGATG  
21801 GTCCCTGTCA TTAAAGAGCG TCCATTCTGG TGGCACAAGG AACTCAAATT  
21851 ATGACACAAG ACAGAAATACC TACTCCAGAA GAGAGTCTG TGAAAGCGTG  
21901 AAGGAGGGAC TTGAGTGTGC GATTCAAGGAA GGACTTCACA TTGGAGGGAG  
21951 TTTTTTTAGA TAGGTCTTGA GAAACATTTT ACATTTTGAA CACCTCATAC  
22001 ATCATTGATA AAAAAAGAA GCAATTGGTC GAAACAACTT CATTTCCTCA

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22051 GATCAAGTCT TCTAGGTTAC CTGCATCTGC ACCCACCAGT CCCACCTTGA  
 22101 TTCCTCTCTA GATGAAGGGC GTCTTTTCCT ACCTAAGGCC GTCCCTTCTG  
 22151 CTTATGCTGG GGACTCCTTT GCTCTTTGGG GCATCCTCTC TTCTCCTGGG  
 22201 GAATTGATCT CTCCCTCTCT ACTTGAATAT TCCTACTAGT GTATACATGG  
 22251 GCTTCCGTGT CATCCCCCTT GATCCCGCAT TGCCGCCAGC CACCCCTCAT  
 22301 TCCTTTTAGGC CTTTCACAGC AAAATTGCTG GAAAGGGTGG TCTGAAGTCA  
 22351 CCATCACTAC TTCCTCCCTT CACATTCTTT CCAAGCCACC ACCACTTTAT  
 22401 GGGGGCTGCT CTTTGGAGG CCACCTATGG ACATTGCATC ACCTTTCTGT  
 22451 CCTTTTATCT TAAGTACCAG TTAGGATGCT TTCAGCTGCC TGTTGCAGAA  
 22501 TGTCTGATA CAAGTACTT ACACAATACG GACATTGACT GTTAAGAGAG  
 22551 TTACGTTCTC ACTGAACAAG GATGTTCCAG GCTTGGCTTG GGTGTTTCAT  
 22601 AACACCTTCA AGGACCCAGA CTTCAGTTTC CTGCCCTGCC TCTCTTGATC  
 22651 ACATCAGCAG ATATTATGTC GTCTAAAAAC AGGGAAGGGA GTGAAGTAGC  
 22701 CTCTGTGTTT TTCTTTTAT CATGGAGGAT GTTTTTTTTG CCCTGCAAGC  
 22751 CCCATGCACA TTTCTTAAAT ATCACCCCTT AAATCATCC CTGGCAAAGG  
 22801 GGGATGGTAT TATCCTTATT GGCTTGGACC AATTAAGATT CATCCCCTGA  
 22851 TGCTGTGAAT GGGACGCATC TTCTTTGAAA TGTGTGCTT TAACCAAAAT  
 22901 TGGATCTGTT AAAGGAAGGG GGAGCGCCTA AGGTGAAAGT GCCAGGCAGT  
 22951 GTCTGCCACA TTTTCCCTGA CCCTTCCTAG CAATTTTGAC AGCCAGCCAC  
 23001 CCCATCCTTC TTGAAGCACT TCATTTCCAT CACATGCTTT GTGACATCAT  
 23051 TTCCTCTGGG TTTTATTTAT TTATTTATTT TTTTATTTAT TTGAGACAAA  
 23101 ATCTCTCTCT GTTGCCCAAG CTGGAGTGCA GTGGCACGAT CTCAATTAC  
 23151 TGCAACCTCT GCCTCCCGGG TTCAAGTGAT TTTCTGCCT CAGCCTCCCA  
 23201 AGTAGCTGGG ATAACAGGCA TGTGCCACCA CACCTAGCTA ATTTTGTAT  
 23251 TTTTAGTAGA GACAGGGTTT CACCATGTTG GCCAGACTGG TCTTGAACCTC  
 23301 CTGACCTCAG GTGATCCACC CGCCTCGGCC TCCCAAAGTG CTGGGATTAC  
 23351 AGTCATAAGC CACCGCGCCT GGCCGCTCTG GGTTTTCTTT TAACTTTCT  
 23401 GGCCACTCCT GTTTCCTGTT GACTCCTTTC TCATTGCTCT ACCTCTAATT  
 23451 GGTGGAATGC CCAAATAGTT AGACCTGAGG TCCTTCTTGT CAGGATCTGT  
 23501 AGTTTCTCCT GAGTGATCTC AGCAGTCCCT TTGTATCATC TATATGCCGA  
 23551 GTATATCCTA AACTTGCTTC TCTCAAGAGT TTGTCATCTC ATTGAATGAG  
 23601 TTTCCCATCT CATTGATGGG CACCGCCATC TATCTGTATA GTTGCTTAAA  
 23651 GTACGGGCAT GTTGATGAG TCCTCTGTTT CCCACCCCTG CCATTTTGTT  
 23701 CTCCACTCAC CAGCAAGTCC TGCCTGATAC GATATCTAGA ACACATCCAG  
 23751 AATCTGTTTG TTTCTCTCCA TTTCTGCTCC TGCCACCCTC ATTCCACGCA  
 23801 TCTTCTGTG TGGAGAGCTG ACAGCCTTTT TATCGGCCTC CTTTCTTCTA  
 23851 CCCTTGCTCC CAATGAATTGA TCCTCCGTGG AACAGCCACA ATGATCTTTT  
 23901 AAAAATATGA ATCTGATTTT TCTTGACCCG CAGCTTAAAA TTCTCTATCG  
 23951 GTTCTCTTTT CCACTCGGCA TAAAATCTGC TTTCTGGTGC TGGCCTGCAG  
 24001 CACCTGAGT GCTGGCTGTG CTGACCTCCT TTCCAAGGCT GGTCTTGAGC  
 24051 CGTCTTCTC TAACCTATGC TGCATTCTT TCTGCTTCC TTGAATAAAA  
 24101 CAAGCTCTC CTGATCTGAG GGCTTTTACG GGACCTCTTT TTTTTTTTTT  
 24151 TCTCCTAGGA TTATCTTCTG CCAATTTTC ATAGGACTGG CTTCTCCTCG  
 24201 CCTCTGAAAT CTCAGTCCAA ATGTATGTC CTCCAAGAAT CTTTCTCTAA  
 24251 CCGCCCACTC CTGCTGGGCA CCCTCTGTTG TAGCATACTG TTAGGAGTCT  
 24301 CTGCATCATG CCTCTAACTC TTTGAAAAAA AGTTCTATTT GTTAGTTTAA  
 24351 TAAACTAAAA CTAAAAAATT TATAAACCAA ATTTCAAAAT TTTAAAAATT  
 24401 AATAAACTAA AAACAGTACA ATGATATCTC TGTGAAGTCA AGGGAGGAGA  
 24451 GAGTTTTAAG AAGGGGAAGT TAATTAGCAG CACTAAAGGC TCTACAACGA  
 24501 CTCAAGATAA TGATAATGAT GATGATGATG ATGGTGATAA TGACAGTGAT  
 24551 AACTAACATT TATTGTTACT ATGAACCTGG AAGAGTGCCA GGCATTTTGC  
 24601 GTACATTATC ATATTTAATT CTGACAGATT AAAAGTCTCG ACAATGCCTC  
 24651 TACTGTCAAG GAATGTTATT CTCATTCTCA GAACACTGAG ACTTAGGGAG  
 24701 GTCAGTCAAA GTGCCTGGCA CATGGTAGCT TTCGATTAAT GTTTGCTATG  
 24751 TGAGTAAATA AATTTCCACA AGGTCTTGGA GCTGGTGAAT GGTAGAGTTG  
 24801 AGAGTCTAAC TTGATCTGA CCGAATCCAA AGTCCGTATT TGTAACCACT  
 24851 GGTCTATATT TGCTCAGATG AAGACAGAGA ACCCCTTAAC AGATTGAGAA  
 24901 AAGGAAGCCT AATATAGGAT AAATGATTTT TTATTTATTT AAAACATGAT  
 24951 AAATAAAATT AATTTTCAGT CCAAAACCTT CTGAATTTTG GAATTCTGGA  
 25001 CTCCATTATC TCAATTATTT TGAAGGCATA GGTGAGTTCT TTTAAAGAAG  
 25051 CATTAGGAAT GAATCCAGAT TGAACAATTT TCTTATTTAA ATACCTTAAA  
 25101 GATGCATTCT TATGATGAGC CAGGTTTATT GTCCAGGAAA GCTATTAAAA  
 25151 CTCAGTCTTT GTGATGAGTG CAGTAAGAAC CCCACTGAA TTACGTAGTG

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25201 AGCAGGTGCT TCCTAAACCA AGTTTCATGT TTGACAAGCT AGGAGAGAAC  
25251 CCAGTGTTAA ATGTTTTCTG GCATGTTGGC CTTTGGTTTC TCATATTATG  
25301 GGACATATGT TTAGTGCTTG TGGTATATGC TTAGCCTACT CTTGTAGGAT  
25351 GACTGAGACC TCACACAACA TCAAGGACAT AGTCCTTGCC TTTGCTGAGT  
25401 TCAGAGTGTA ATTGGAGTGA TGAAACATAC ATGTGAATAA ATGCAAAGTC  
25451 ACAAGTAAAG ACAGTTAATG TGATTGATGA AGGACGTGTG GCACAAGATG  
25501 GATAAGAATG AGAAGTAGAA GAAGTAGGTG GTTTTGAACT TTCGTTACTC  
25551 AGGGAAGGGA ATGTATGTGG ATTGGTGGAG AAGAGAGGGG AGGAAGATGG  
25601 TTTTAAGCAC TGGTAAGATG GTGCATATTT GCAAGTTTGT CTCAAGGGAT  
25651 AGAAAGGGCT GAGACCCAGT GGGGAGGAAT CAGAGGGGAA TCGGCAAAGA  
25701 GAATTAGGGA AATGAGAACT GTCAGTAGAG GAAGTGAGAT TAGGCTGGCC  
25751 GGGAGCTATT TGGGGTTTCT GAGTACTGAT GTTACATGAA GGAATATTTG  
25801 TGAGGGATAA ATATTGCAGT GGGTGCATTT GAGAGCAAAA CCAGATTCAG  
25851 GCCCAGTTAG GGAAGGTTT CTTAAACGTC GGCCTTTCCT ATGCCATCTT  
25901 CACTTTTAA TTTTTTGGTG GCCATATTTA GATATCAGCT GTGTCACTAT  
25951 ATACTTAATA TTTTCTGTAA GTTGATTTC CTTTTAAAAA CTTAAATTTA  
26001 GCTTTGCCCT ATGCAATAAA CTTATCATTG TTTACTGAAT GCTTTTCTTT  
26051 AAATTTAACC CCTTAAATCT TAAATAAATG TAGCCTTACC CCAAGCACTA  
26101 GTACCTATGA AATCATAGGT ATTCTGTGCT AGTTCTATTT TTCCAAATGC  
26151 ACAGTAAATT AAACCTGCGG CCATTAAAAA AATGTTGCAT ATGTGTGTTA  
26201 CCTAATGCTG TCTTGTGTAC CTATGGTTCA TGTGCTACAC TTTTGGGAAT  
26251 ACCCAAGGCA CTGTTACAGC TTTCTAACTG TGACATGATG AAACCTGAATA  
26301 AATAGGAGCC AGCTACATTT ATTAGATACT TACTGTGTG AAGCCCTTGT  
26351 GATGGAGGAG ATGAACATAT GATGCAGTCC TTTACTCTAA TAGATTGGGA  
26401 ACAAAGCAGA GAGAGAATGG CACACCAATG AGAAAGTGAG ATGTAGGCCT  
26451 GACAGGTCCA ATCTCTGCCA TGTAAGCAG CTTTTAGATA AGCCATCTGA  
26501 TATCAGCTCT GCCACTGGTC AGCTGAGTGA GCTGCCACTC TGGAACCCAA  
26551 GGGTAAGCTC TCCTCAAATT CAGTTCACCT CAACAAGTAT TTGCCAGATA  
26601 CTATATGACA CTTTTGCAGA TATTAAGGAA ATTAAAGTGT CTTAGGGAGT  
26651 GTTAAACCAG AAACCAAAGT ATGAAGTGGG AGACAGAGTG GAATAAGGAC  
26701 TGTAAGAGAG ATGCAATGAC ATGTATTTCG TACTTACGGG AGGAAGAGTT  
26751 TATAGCCAGC TTTGGGGACC AGGGAAGGCT TCCTAGAAGA TGTGTCATTT  
26801 CAGATGAACT TTAAGATG GGATCATAA AAAGGCAGTG ATGGAGGGTG  
26851 TTCAGCAGAG GGAAGGGCAT CATCATGACA ACAGAGAGGG AAACCTGAGGC  
26901 ACCTGTGAGG AGAAGAGCAA GTCTCCGTTG TTTGGTGGTG ATGTTGGGGG  
26951 CATGAAGGTG GAAAGGAAGG TTGGGGTCTT ATGGATACCT TACATGCTAG  
27001 GTTGAACATG GATTTATTTT CACAGATGAT CAGGAGCCAT GGAAGGCTAC  
27051 ACTAGCTGGG CGTACATAAT TTAAGTCAGA GGGACAAATA ACTGCAAGCT  
27101 AAATACTCTT AGGGAGAAAC TGCAGCAATC TGGGTGAGAA ACAATGAATT  
27151 TGTGAGTAGT CACCATAGCA AAGGTCTGGG CTAGGGGGGC ACTGGAGGAG  
27201 TGAAAAAGAA AGGTTTAAAT AGTCACTGAG AGGGCTGAGG ACCCACTAGC  
27251 CACTGGCATA GTGGAGTCAA TCATTTCTCC GAAATTACGA GGAGGAGAGG  
27301 TGGGGCATCT CTGAAGCGTG GAGCAGTGGA GGATGGTAT TGTATGGTAG  
27351 GGGAAAGAAG ATAATGATCG CAGTTCAGT AGGTGATGGA TGAGGAGGGG  
27401 AAGGCGTTTT ACAGATTATT CACTGGGAAA GAACAGAGGC AGTCCACACT  
27451 GTAGTTAATT CTTTTATTTT TTGTCTTTAA GTATACTCAA GGATAAATAG  
27501 CCATACAATT TCTGTTTGGC TTTTCATGCT GGAGAGGTGC AGAGGTTGCA  
27551 CTGAACGTGG ACGATATTAA TTTTGACTTG TACAAGGGTA CTGTGTCCTG  
27601 GGAACGTGCC AATAATATTC TATGAAAAGT CATTTGAGTA ACTCATTTTT  
27651 ATACATAAAA TAGGTAGTTC CTTTTCAATT TCCTTATATT TTGGGATACT  
27701 TACATGCCAG GATTCCCTCTA TTTCAATCTC TTGTTTTCTA CCTGAAAAGA  
27751 TCTTACGGTT GGTGGCTGTG GATGCAATTC TGCCTTTACA CAGAAATGAC  
27801 TCTCCTGGGC ATACCTTTAG GCAAAGAGCA GATGAACGCA TAACGAGCAG  
27851 CTTTGAGATT TGGTATTTCC ACTGCAGAAC GAAGAGAAGG GTGGCCCACT  
27901 GGAAATTTCC TCAGAGAAAC GTCTAAGTCT GCATCTCCCA CATCCATTCA  
27951 TTTTCATGCA TAGTTCTTTC ATCTGTTGTT TTTTAATTTA TCTATTTTAT  
28001 ATAATGTCTA TCTCTGTAGT ACCTGGGATG AAATGCGCCA ATCCTGACTG  
28051 CAATGAATAG GGCAAAGCAA TTCTTGGGAG CTGCTCTGGG CAGGAAGTGG  
28101 AGGCTGAATT CTTTTAAAGG AAAATTTTTT GGGGATCGTG ACTCACTGGC  
28151 CTTTCATCCCC ATCATCACTG GGATTGGTTA AGTGCCAGGA AACAGCTGGA  
28201 AGTCGACAGA CAATTTAGGG TACAAATGAA AGGAGAAGTT ACTGTTAAAG  
28251 GGATCTGTAT TCTCTGTTAT CAAAACCACC AACGCTGTCT CCTAGCTAAT  
28301 AGGAACCAAA ACTGTGCCCT GAGAATGCTG CCAGATGTTT CTCAATAGGC

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28351 ACGTTACGTT TTATGGTCCT GGATGCTGCA CTTAAAAATA GTGTCCAATT  
28401 TCAAACCTCAC TATTAAGTAG AACTAAACT TTTGGAATCT ATTAATGGAT  
28451 CTAGATCTCC AACCTAGTGG CAACAAATGT TTGAAGTGAA GTTTATTGTT  
28501 TTAAGTGAAT TTTAAATGTG AAATGATGAG TATTTAACTT CAATTTTTTT  
28551 GCATGATTTT TCCACTGTGG CAACTTTCCT TTTAAATGA TAGAACCTCA  
28601 TTATAATGTG GCTGATAGGA AATCTGTTA TTCATGCATA TATTTATCA  
28651 TTTACAAATA TTTATTACT ACCTACCAGG CTCTGTGCAG TACTCCGATA  
28701 AACTGGAACA AGAGCCATAT TTTGTACTTT GTATGTTTCT CCAAGAGAAA  
28751 TGTTCTATTG TACTACATTA ATTCTTAGAT GCATTTTGA ATTATTTACC  
28801 CTTCTGAAAT CAGAATGTGT CTTACTAGCA ATATGTCATA ATTTAATGG  
28851 CAATTTAAAT TTTCAAGAGG CACATAAGAT AATGATGTGT TTTGTAATTG  
28901 ACAATGTCTT GATTTGATAG AAGATATTTG TACAATACTA TATTGGTACC  
28951 ATGCTTTGGC CGATGTAATG GTCCTATTG GAGTTCAC TAATGTTAA  
29001 GCCTCTAGTT TTAGGCGTTG ATGTTGGTCC AGGGACACTA GGACTCAAAT  
29051 GCCCAGATGT CCAGGTCTAA GAGAGAAGAA TCAGAAGGTG AATGCAGAGC  
29101 CCAGTGGGTT CAAGCCATGT AGACAATAAT AGCAGAATGG AGAGACATTT  
29151 TCCGATGCCCT CATGCTATG CATCTTCTCT CCCTTCTGG CCTGCCACAT  
29201 AAATTCATTG CAGTGCAACT CTGCCAGATA TCAGAATAGA GCAGGAGGAA  
29251 AGAGAAACAG CTGCAGCATG GGAGATAGGA CTCATACCAA GAGAGATTAG  
29301 GCTCGGTGTG TATACCTAAT GATGGTAAAG TGAACAACCA GGTTACAGTG  
29351 ATAGCAGCAA CACGCATTTA TCGAGTGTCC TATCCACTTC AGAAACACTA  
29401 TTTTAAATG ATAACAATTC TACAAGATAA GTATTCATTG ATCATCAATA  
29451 TTATCCTTGT TTCATGTGTA AAACCTGGGC TCAGAGAGGG TAAAAACTT  
29501 GTCCAAGTCT ATACAGTTAG GAAATGGTAG AACCAGGATT CAGGCTTGC  
29551 TCCATGGGGC ATCAAGGTCT GCTCCACTTC CAGTGTGCCA TGCAGTTCC  
29601 CCAAATCTGA GAACATGCAT TTTACTTTATG TCCGGTTATG TGAGGTCTCA  
29651 GAAGCCAGAC AGGGCCAGAG TATGAAGAGT TACATAAAAG AGCTTCAGAA  
29701 TCTAATAGGG TTCCTGAGCA AGATTCTACC AATACCTGGA ATAACCTCCT  
29751 CTGTGTATAG CCCAGGTGCA TGGACTAGAC CAGATTGGGA GGGGATGGTT  
29801 GCCCAGCAGG CCCAGAGAAG GAGCTGGTAG CATGGTGAAT TAAGGGCTGA  
29851 GGATCAAGAA TTTGTTAGTT TAATTAGACC CCCCAGAG CAGAAGTGCT  
29901 GTTGTAGTTA AGACTCTGGA ACTCAGTGAT AGGATATTTT AATAAAGCCC  
29951 ATGATCTCAA GAGGAACCTG CTGAATGGAT GAGCTCACAG TCCATAGTTG  
30001 GGAGCTAATG AACAACCTTA ATTATGTTTC TGATACTAGT GGAGGTGTTT  
30051 TCCTGTCAAT GAATTCCTTT TAGATTTTGA CCCCATGTAG ATCTCAAGGA  
30101 AATAAAATAA TAAATAAAT AGTTAATTAA TTTATTTATT TTGAGATGGA  
30151 GTCTAGCTCT GTCGCTCATG CTGGAGTACA ATGGCACGAT CCCCAGCCAC  
30201 TGCAACCTCT GCCTCCCTGG TTCAAGCAAT TCTCCTGCCT CAGCCTCCCG  
30251 AGTAGCTGGG ACTACAGGTG CCCGCCACCA CGCCTGGCTA GTTTTTGTAT  
30301 TTTTAGTAGA GATGGGGTTT CACCATGTTG GCCAGGCTGG TCTCAAACCTC  
30351 CTGACCTCAG GTGATCTGCC TGCCTCGGCC TCCCAAATG CTGGGATTAT  
30401 AGGTGAGCCA CCATCTCAAG GAAATTTAAA ATGTTTGGGT TTGCTACTGA  
30451 AGAGCCAAGA AGAATTTTGC AAATTATGAG AAAGAGCCCA AGCTTTCAAA  
30501 TGTCCAAGGT GGCTATTCAT ATCTGGGAAC TAGGAAGAAT TCCAAGTTGT  
30551 TCACCTATGC CTGTTTCTAA TGCCTTCCCA CAAGGGTGAC AGAGCAAAGT  
30601 TGATTTCTAT TAATTTAGGG GAAATAATCT CCACTGAATG GCCAGAACAA  
30651 TAACCTTTCT AATGACACAC AGAACAACGC TACTGTCACC CTTGTCACGG  
30701 CTGTACTTGT CATCATAGGT ATTTATTAGG TACTTAAATA CTTGTTTGGC  
30751 TCAAGATAGC TCACAAAGAG GGTCAATAAG TCTCGTTTTC TGTCTTTTAG  
30801 AGTTTCCAGT ATAAGAACAA ATAGATGAGC AAACACATAT AAGAAATACA  
30851 TTGAAGAGAA TTAGAATATT CATGAATGTA CAGTGAGAAA TTCTTAACCT  
30901 ATACAGGGTC ATAGTTGACT TCATTTAAAT ATTTTCTAAG GGTAGAACGC  
30951 AACATTATTA GAATACCTGA GAGGGGAAGG TTGGGACCGT GCCCTTGAAG  
31001 TAGCATATTA AATTTAAGAG AGGAAAGAGA AAGCTGGCAA TATTTCAAGT  
31051 CTGGAACCTGA TCCTTAAGGC AATACTTTGC TGCTGGAATT TGTATTTTAA  
31101 AGACCAGCCA GAATCTCTTG TGGTCCTTTG CCCATGTAGC CCTATAGGA  
31151 CGTTTGTATA TTTGGATTGC TTAGGCCCTG AGTGTCTAGG GCATAGGCAG  
31201 AGTCATTGGA TCAACCCATG TATCTGTTGC TTGACACATT GCTCTGGATA  
31251 CATTGTACCC AAGAAATCAG CCCAAGTGGG ATCCAGCCCA AAAGAGAATT  
31301 GTTGATTTTC AAAACTGAAC AGTCCAGGCA AAGCTCAATC TAGGGCTCAG  
31351 ATCATGCATC CAGGACTGCA TAGTCTTCTA TTTCTTGATT CGTCTTCTTT  
31401 GCATTGCTCT ATTCTTAGGC AAGTTCATC TTGGAAATCC TAAGGTGGCT  
31451 GCCGAAGGCT GCAGACCTC CTCTGTCTTC CAGATTTACA TCCTTCAGGA

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31501 GAGCGAAAGC TCAGTTCCCT AAGGCTGAAA CAAAAGTCTT GCAATGGCAT  
31551 CTTTTTGGTC CTGATTGGCC TGTCTAGGGT CAGATACTCA TTCTTTAATT  
31601 ATCATGGTGG TGATTGGGGG AATCGAATGT GCTAATTGGC TTTGCCCTGGG  
31651 TTGTGTGCTT CACTCATGGA ACCTAAGAGA GAAGCCCAGT GAAGCCCAAC  
31701 TCAAGGGCTG AGAGTGGGCT GTAGTGGTTT CCCTAAACAA AATCGTACT  
31751 GTTGACATAA TATGGCATGG TCATGGATGC TGAGAGAATG ATGTAGAGAA  
31801 AGGGTGGATG AGAATGGAAG CAGGACTAGG CACAGTGGTT CACACTTGTA  
31851 ACTTCAGCTA CTTGGGAGGC TGAGGCAGGA GGATCGCTTG TGGCCAGGAG  
31901 TTAGTGACCA GCCTGAGCAA CATAGTGAGA CCCTATCTCT AAAAAAATTT  
31951 ATTTTTAAAT TAGCCAAGTG TGGTGGTGCA TGCCTATAGT CCCAGCTGCT  
32001 TGGGAGACTG AGGTAGGAGG ATCGCTTCAG CCCAGGAGTT CAAAGTTACG  
32051 GTGAGCTATG ATTGCACCAC TGCACACTAG CCTGGGTAAA CAGAGCAAGA  
32101 CTCTGTCCAT AAAAAAGAAG AAGGAGGAGG AGAAGGAGGC TAAGAAAGAA  
32151 GGAAGTGGGT ATGCTAGTTT GGAGGTATTG AAGTCCAGGC AAAGAATCAT  
32201 GGTGGCTTGG ACAAGCAGAG TGACTGCTGA GATGGAGAGT GGTGGATGGG  
32251 TTTGATTCTT AGTTTGAGAG TGAATCCAC AGCATTGCTT GATGAAATAC  
32301 ATGTTGAAGA TGGTAAGGAA AATAATTAAA AATGATTCCCT AGGCTTGTGG  
32351 ACTGAGTAAC TTGGGAGGAT GGTGGTAGCA TTTCTTGAGA TAGGTAAGAA  
32401 TGGAGGGTTT TTATTATTTT AAAATCAACT ATGCTATTCT AGCTCTGTGG  
32451 GATTTGAGAA GCCTGTTAAT ATCTGAGTGG GAATGTCAAT TGGACAGTTG  
32501 GAGACAGGAG TCTGGAATTT AGAGGGTAGA GCTGGAATA TATATTCATG  
32551 GATATATGAA TCCATAATGA GAAGGGGTGG CTATAGCAGT TTTTATTTTT  
32601 ACTTTTAAAG CCATTTAACT AGTTTATTA AATTGGCGGC CTTCTTGAGA  
32651 GTACAAACCA TAAATCACTT CATTTATCTT CAACTCCTAC CTTCACTCTT  
32701 GCCCTGTGAG GCCAACCCCTG GATGATACAC CAGAAATACC TCACAGCTTT  
32751 TCCAGGCACT TTA AAAATCA AATCAAGTAA AATAGAAATA AAAATTGTAC  
32801 TTTTTTTTTC AGATATTCAA AAGTCCAGTT TTACATGAAT CAAAACATCA  
32851 ACCTCTCATC CAATTCAAAG CTCTCTTTCA GCCGGGTGAG GTAGCTTGTG  
32901 CCTGTAATCC CAGCACTTAT GGGAGGCCGA GGCAGGCCAT CGCTTGAGCC  
32951 CAGGAGCTTG AGACCAGCCT GGTGAAACCC TGTCTCTACT GAAAAACAA  
33001 AAAC TAGCTG GCGTGGTGG TGTGTGCCTG TAGTCCCAGC TACTCGGGAG  
33051 GCTGAGGCAC AAGAGTCGCT TGAACAAGTG GGGAGGACTT TGCAGTGAGC  
33101 AGAGATCGTG CCACTGCACC CCAGCCTGGG TGACAGAGCC AGTCCCTGTC  
33151 CAAAACAAAA CCAAACAAAA AAACCTGTAA TCCCAGCACT CTGGGAGGCC  
33201 GAGGTGGGTA CATCACCTGA GGTCCGGCAGT TCAAGACCTG CCTGGCCAAA  
33251 ATGGTAAAAA CCGTCTCTA CTGAAAATAC AAAAAATTGG CTGGGCATTG  
33301 TGGCGGGTGC CTATAATCCC AGATATTTCAG GATGCTGAGG CAGGAGAATT  
33351 GCTTGAACCC GGGAGGCAGA GTTTATATTG AGCCGAGATC GCGCCATTGC  
33401 ACTCCAGCCT GGGTGACAGA GGGAGACTCC ATCTCAAACA ACAACAGCAA  
33451 CAACAACAAA ACAAAATCAC AAAGCTCTCC TTTCCCTGTA GGCCAGGCCT  
33501 GGCCTGAGAC ACTGCAGATC AGCCATGGGA AAGGGAAGGC GGGGGCCGTG  
33551 GCTGTTCCTT TTCCCTCCTT GTGCACACTC CTTTCTGCTG GGCTTTGCTG  
33601 CTTTTGGCTC CACCACAGTC AAGGGGCAGG GAGAAGGTGA CTAGAAAGCA  
33651 AGGGTGT TTT ACTTAGCTGG TGCTTCTTAT GGTTCTTTCT AGTCATGAAA  
33701 TAGTCTCTGT CTTGCAGGTG TCCAGCTTTT GTGAGTTCTT CGCCACCCTG  
33751 TGAAGACCCC CAGACTTTCC TCTACAGACA TGGATGATGC CCTCCCTGGC  
33801 TGGTCTCTTA TGACACCCCC GGCCTCTCAG CTTCTGCCTT GAGTGTACCC  
33851 TGAAC TTTT TTCTCAAGTG GATGGACTTC TTGGGGAAGG CTTTTTTCTG  
33901 AAGGCTTTGA TGTAGCTTCT GACCCCATCC AGTGCCTACT TGGCCCAGGA  
33951 GAAACCATTA GGCATCTTTG TGCTGCCATA TATGGGGAAA GCACGTGACT  
34001 CCACTGTTGC CTACCCTCCT CAGCCTGCAT TACAGGCCAA ACGCTGCGCA  
34051 CCCATGTCTG ATTTTCCCAG GGCCGTCTCA TTGCACACCT CCAGAGGGCA  
34101 TCATTACATG GTGTTCTCCT AGAATTGCAC AGTTAATGTG GCAGCCCTGA  
34151 GTTCAGACAA ATCTCTCATG CCCCTACCTG TAGCAGTGCA TTCTATGAAG  
34201 TATGCAGTTC AGCAGGCACC CAGCTGGGGT TCCAGATGCT GAGACCCCTT  
34251 TCTGCCAACC CCTGTGATCT CTGAGCAGTT CTCTTTCTGC TCCTTCATTT  
34301 GCCATAGTGC TGCAATGCTA TGTGTTCTTT TCTGCTAAGA AATGCTTTTT  
34351 CTCCAGCGAA TTCTCTTATA TGGCTTAGAG ATCATATGCA AGCTCTGCAT  
34401 TGATGGATCC TCAGTCTTCA GTTTTGAGAG ATCTCAGTAT AAACCCCAAG  
34451 ACAACAGGAA AGGGCTCACT TAACATTGCC TTGTAACAGA GAAACCCTCT  
34501 CTTTGAATGA AAGCTGTCTG GGAAGCTCAG TATATAAAGC AAGTGACATG  
34551 GTGCTCCATT GGGGTGGTGG GGAACGAGGG GCGGGGTGCT CAAGGCTGGC  
34601 TTCTGTGCAC AGTTAGAAAA CTCCTGTGCC TGAGAAAGCC AACCGTGGTT

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34651 TCCACGACCA GGAGTTTCCC ACTATTTACA GTTCTGCAGT GTTTGGCTTC  
34701 TTCATGATTT TCTGCTGGTG AAAGCAATAG TTTGTACAAG ACGTGTGGGA  
34751 ATAAAAATAG TCCAGGTGCT GCCCTTTTCC GCGGCAGAGG GACCACTGT  
34801 CAGGCTGCCC TAGTGGGCCT CTTCCCACAG CACGGTTCTG CCACTTGAAT  
34851 ACCTCCCTGC CTGTTTCTCG ACGCTGACCT AGAAGCTTCT GGTGAATGCT  
34901 TTGCTTCTGC ACAACTTGCA TGGTGGGTGC CTTTTTTTGG TGAATGAAAA  
34951 GGTCTTCCCTC TGGCTCTGAA TATAGCAACT GCATGACCTG CAGAAATAAT  
35001 TTTGTTGTTT CTTGTGGGCC ATGTTAGCTT AGGGCTTTGT ACCTTATAGG  
35051 GACATTGGCA AGAATTTTCT CAAAAGGTTT TCATCTGTAA ATTTTCATCT  
35101 TTGCACATAG TAGAGAGCTT AGAACGTGAG TCTCGTTCCA TCTGTTATAA  
35151 GTTTTGTAGGC TTTGGGCAAA GTACCTAACT TCCCTGTGCC TCGATTCTC  
35201 CATCTGTAACT ACTGGAGCAA GAGTAGAACC TCCATCCTGG TCTGCGGTGA  
35251 GGCTTAGTGA GGGCATTGAT GTGAAATGTA CACAGTGCCT GGCACAGAGC  
35301 AAGCACCCAG AACATGTTAC TAATTGCATT AGTTTCCTCT TGCTGCTATA  
35351 ACAAGTTGCA CAACTGTCAT AGCTTAAAC AACACAAGTT TATCATATCA  
35401 TTCTGCATGT TAGACTTCCT AAGTGGGTCA TATGGGGCTA AAATCAAGGT  
35451 GTCCACAGGG CTGTTTCCTT CTGGGGGCTT TAGGGAGAAT CCTTCCCTTG  
35501 CCTTTTCCAG CTTCTAAAGG CTGCTCATGT TTCTTGCTC ATGGCTGCAC  
35551 CACTGTAACC TTTGCATCTG TCCTCACATG CCTCCTCTCT CTGGCCCTCC  
35601 CGCTCCCCCT TGTGATTACA CTGGACCCAC CCAGATAATC CAGGATCATC  
35651 TCCTGATCTC AAGATCTTAA TCACATCAGC AAAATCCCTT TGTCGTGTAA  
35701 AGTAGTAAAG TAATGTGCTC ACAGGTTCCA GGGATCAGGA CATGGACATC  
35751 TTTGGGGGAC CGAACATTAT CCTGCTGATC CTACCAATTA TTTAAAAAGT  
35801 TGTCCCTGTA TATCTACAG TGTGCCTCTG CTGTGTGCTG GGCATACAAG  
35851 GTGAATAAGA CACAATGCTT ATGCCAAAAT AGATACACAA GCACGATGCC  
35901 CTTAGTAATA ATCACAGTAG CTGACATTTA CTGAGTATTT ACTATGTGCC  
35951 AGGCATTGTG CCAGGCACTT CAAGTGAATT ATCTTGCTGA AATCTACCA  
36001 TGGCACTAAG GGAAAGGTAT AATTTCCATT TTAAGGATAA GAACACTGAG  
36051 GCTTAGAGAG CTTAAGTATT TTTTCTCAAG GCCACAGAGC TAAGGACATG  
36101 AGCTCAGGTC TATCTGATTC TAAGCTTGAA CAATTCATCA CAGCCCCCTT  
36151 AAAAGATGGG TGGGTTTACC CTCAGGCTCT CTTCTTCACT GTGTGTGTAG  
36201 CTAAAGATTG GCCAGCTTAA GAGGAGCAGA TCACACAAGC AGCTATGATG  
36251 AGGGCCAGTG GGCAGAGCTC CCAGAGGAGG CTGATGCAAC ATTGCTCCCA  
36301 TTCCTGCCAT CACCCAAAAG TGCAAGTCCA TGGCCCTGGC ACTTGGGCAA  
36351 ATGTTGCCCT GTCTTCAAGT GAATCTAAAA AACTGTGTAA GGGCATGATT  
36401 AATTTACCAC AACTGGATTG TCCCAAGAT CACTTACACC ACTAATGG  
36451 GGCCCTGCTT CAGCCTGAGG AACTGTGTGA ATAAAAGAGA AGAAGCCAG  
36501 TGAGATTCTT CTTTCATGAT TAATAGAAAA ACCACCTGGT GACTTTAAAA  
36551 GGCAAAGAAG GAGGTACATT CAGATGAGTC AGAAAGAAAA GGCAGCATTT  
36601 GAATCCTAAA GGCCATGTTA CTCTTGATCT TCTCCAGGAT TTCCTTTAGG  
36651 GAAATGGAAA TTTTACATG GAGGGCAGAG GTGGGGTGAA GGTGGACTG  
36701 TAGACTGAGT GGTGTTATAA TGAGACCAAC CCGGTGCTG GGTGGAATCA  
36751 TATATTCTAG ATGGGAAGTT TATATTCTAA TGAGGGAGAC ACACAGGGAA  
36801 TGAGCAAATC AGTACAGAAT ACAATCTCAG CTAGCACTAA GTTGCTTTGA  
36851 GGAAAATCAA GCCAGTGGT GGGCTAGGAA GAGACTGGAG GGGAGAATGG  
36901 CCCTTCTGCA GTGGGTGGT GAGGAAGGAA GTCCTCGCTG AGGAGGCAGC  
36951 ATTGAGCACT GAGAGGGAGC TACCCTGTAA GGCCCTGGGC AAGACTGTTC  
37001 CAGGTTGAGG GAACAACACA CGTGCACTCC CTGAGACTAG AGCTAACTTG  
37051 GACAAATGAG AAGACCACTG TGGCTGGGCG GTATTGAGG ACAGATGGTA  
37101 GGAGATGAAG GTGGAGAAGT GGGCCATGCG CAGAATTGG GGATCTAAGG  
37151 ACAGGAGTTT GGGAGGTTCC TCAAGGAGTT GTGGGAACCC TCTGGGAAGG  
37201 TTTTCAGCGT GCAGTGGAAG GATCGAATTT ACATTTTGGC AGGCAGGTTA  
37251 GGACACTGTT GTGCAGAAAC AACAATGGCT AATGGGCTGG TTGAGGTGGG  
37301 AATGAAAGAA GTGGTGAAT GAAATCAGGA TGTATTTGGA AGGGAGAGTT  
37351 GGCTGGACTG GCTGTGGGTG TCAGGGCAGG GTGGAGCCAT AGACTACTCT  
37401 GGATTTTCTG TCCAAGCCCT GGATGAATG CAGTACCATG AATTGAGATG  
37451 CACAAGCCTA GGAGAAGAGG CAGATTTGGG ATGTGAATGT GTATGAGTGA  
37501 AAACAAAATT TCTCTTTGAA TCATGTTCAA TGTGCTACTT GGACAAGCAG  
37551 CTAATTGGAC AACTAAGTGT AAAAATTTAA TAGTGAACAA TGAGTGAAC  
37601 AAAACGTTAG AGCTGTACAT TTTGCTTTAG AAGGGGCATA CTTTTTGCTT  
37651 TAGAACGTGT GGCAATCTAA TACAAATGGC CAACAACAT ATGAAAAAAT  
37701 GCTCAACATC ACTAATGATA AGGGAGATGC AAATCAAAAC CACAAAGCGA  
37751 TACTGCCTTA CCCCTGCAAG AATGGCCATA ATAAAAAAT CAAAAAATAA

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37801 TACATGTTGG CGGGGATGTG GTGAAAAGGG AACACTTCTA CACTGCTGCT  
37851 GGGAATACAA CCACTATGGA AAACAGTGTG GAGATTCCTT AAAGAACTAA  
37901 AAGTAGAACC ACCATTGAT CCAACAATCC CACTCCTGGG TGCATACCTA  
37951 GAGGAAAAGA AGTCATTATA CGAAAAAGAT ACTCATACAT GCATGTTTCT  
38001 AGCAACACAA TTCACAATTG CAAAAATATG GAACCAGCCC AAATGCCCAT  
38051 CAATCAATGA GTGGATGAAG AAATTGTGAT ACACACACAC ACACACACAC  
38101 ACACACACAC ACACACACCA TGGGAATACT ATTCCAGCCAT AAAAAGGAAT  
38151 GAAATGATGG CATCTGCAGC AACCTGGATG GAATTGGAGA CCAACATTCT  
38201 AAGTGAAGTA ACTCAGGAAT GGAAAAACCA AACATTGTGT GTTCTTACTT  
38251 ATAAGTGGGA GTCTAAGCTAT GAGGATGCAA AGGCATCCTC ATTGGACTTT  
38301 GGGGACTTGG TGAATAAGGGT GGGGGCAGTG AGGGATAAAA GACAGCAAAT  
38351 TGGGTACAGT GTACACTGCT CGGGTGATGG GTGCACCAAA ATTTCAACAAG  
38401 TCACCACTAA AGAGCTTAGT CATGTAACCA AACACCACCT CTTCCCCAAA  
38451 AACCTACAGA AATAATAATA AAAAAGAACT TGTGGCAATC TAATTGATGA  
38501 TAATTGATGG TAGCATCCAT GTTGGGGAAG GAAGGAAACA ATGCCAAAACA  
38551 CTATGCTAGC TGCTTCACAT GTATTGTTTT TCACAGGGTG TAAGGCTTGA  
38601 GAAGCATCTA GTGTCTGTG TCAGATTATG CATTCTGGAG GCAGATTGCT  
38651 AAGGTTCAAG TCCTGGCCCT GCCTGTTAGT GGCATGTTCT ATGCTTTGCT  
38701 TGCTTATCTG TAAATGGAG TAATAATAAT ACCTTGCTTG TAAAGTTATT  
38751 TTTACATTTA AATGAGTTAA TGCATGTAAA GCACTTGGA TAGTGCCTGG  
38801 TATTGTAATA AACAATAAAT GAGCAATTTT AATGTTACTA TTTTATTTTC  
38851 TCCGTAGGGT GCACCTCAAT AGATGGAAGA GTAGGGCATG TGATAAGGTT  
38901 TGGCTGTGTT CTCATCCAAA TCTCATTTTG AATTGTAGCT CCCATAATTT  
38951 TCACATGTTG TGGGTGGGAC CAGGTGGGAA GTAACCTGAAT CATGGGGGCG  
39001 GTTCCCCCAT ACTGTTCTCG TGGTAGTGAA TAAGTCTCAT GAAATCTAAT  
39051 GGTTTTTATAA GGGGTTTTTC CTTTCACTTG ATTCTCATTC TCTCTTGCCT  
39101 GCTGCCAAGA AAGACGTGCC TTTTACCTTC TGCCATAATT GTGAGGACTT  
39151 CCCAGCCACA TGGAACGTG AGTCCATTAA GCCTCTTTTT CTTTATAAAT  
39201 TAATTACCCA GTCTCAGGTA TGTCTTTATC AGCAGTGTC AAACAGACTA  
39251 ATACAATGTG TTATAACAAG AGTGTTACTT CAGAATCTTG TTTTAACTTG  
39301 TGTATTAGTC AGTGTGCAGG ATGCTTGGGT TCTGTCTGG TTTTGGCCAT  
39351 GTTTCCATTT TATGAGCAGT TCCTCTATCA CAATATAGAT GAATGCCTCT  
39401 ATCACAATAT AGATGCAGCA ATAAGTTGGG ATTGCTGCAT AGCCATCCCA  
39451 ACTTATTGGC ATAAAACAAG CATTTTATTA TGCTCAGATA ATGTGCTTCA  
39501 GGGATTTCATG CAGGACACAG AGGCGATGGT TTGTCTCTAT TCTGCAACGT  
39551 CTGGGGCCTC ACCTGGGAAG ATGAGCCTCA CCTGGGAAAT CTACAGGTGT  
39601 CTGTGGGGTT AGGGGAGGG GCTGAAATCA ACTGGAGGTA TCTTGGCTCA  
39651 TGTGACTGGT GGTTGATTCT GGCTCTTGGC TGAGATCTCA GCGTGGCTGT  
39701 TGGCTGGAAC ATCTGTATGT GATCACTGTG TTTCTCCACA TGGGTTAGCT  
39751 TGAGCTTCCT CACAGTGTGG CAGCTGGATC CTAAGAGTGA GCATCCCAAA  
39801 AGAACCAGGC AGAAGCGGTG TGGTCTTTCA TTATTTAGCT TTGGAGGTCA  
39851 CATAGTGTC CTTCTGCTTT AGTCACAAGC CTGTCCAGAT TCAAGGAGAG  
39901 GGAACATAGG TTCGATGTTT TCACGGGGG AATATTAAAG TCACATAGTA  
39951 AGGAGTATAT GGGATAGGAG AGATTGTTGT AGCTAGTTTT GGTAAATACA  
40001 GTCTTCCAGG AGGCTTAACC TGTGGGCCAC TTATGAGCCT GTCTGGCTTA  
40051 AAGGATCCAG TACACATCTA AATTTGGACA TACTCTAAAA TCAGGATCTC  
40101 TTTTATTTAT TAAAGAACCT GAGTAATCTT AACCTAAGTT GTATTAAAT  
40151 TCAAAGATTG ACTCCTTAGA ACAGCTAAGC TTTCGTTTCA TTAATGGGCA  
40201 CTGATTGAAT CTTGACTCTG TGCAAGATCC TGTGCTAATG GCTGTGGGAG  
40251 CATATTGAGA TGCCACAAGA AGTTGGCATG CTAAAAGGTG AAGACAAATA  
40301 CAGATGGCTT TCAATTAAC AGTCTCTGGA GAGACAGAGG CCACTCACAA  
40351 CCTCTAATGA TAGTTAAAT AAAACTTATT CAGGCCAGGC ACAGTGGCTC  
40401 AGGCCTATAA TCCCAGCACT TTGGGAGGCT GAGGTGGGCG GATCACTTGA  
40451 GGTCAGGAGT TCTAGACTAC CCCGGCCAAC ATGGCGAAAC CCCATCTCTA  
40501 CTAAAAATAC AGAAATTAAC CAGGCATGGT GGTGCGCGCC TGTAATCCCA  
40551 GCTACTTGGG AGGCTGAGGC ATGAGAGTCG CTTGAATCCG GGAGGCAGAG  
40601 GTTGCACTGA ACTAAGATGG TGCCACTGCA CTCCAGCCTG GGCCACAGAG  
40651 TGAGACTCCA CCTCAAAAAC AAACAAACAA ACAAACACTA TTTAAACAA  
40701 GACACAAAGT GAGTTTAATG CAAACTTATT TAGTTAGCAT TGCATTTAAT  
40751 GTTCAGGAAC ACATGTTCCA TTTTGTAGAC TTCATTAATT ACAACTAGCA  
40801 GTTATTTAAG TGCTTACTAG AGACATTGAA TATTCTAAGC ACCCTGTGAG  
40851 TATTATGTAT TTAATTTGCA CAATACAGTG AAGCAGTTAC TTTATCGTAC  
40901 CCATTTTATA GATGAGAGTG AACAGTAGAG AGGTTCTCAT TTTGATGGTT

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40951 AATATTGTCA ACTTGATTGG ATTTAAGGAT GCAAAGTATT GTTCTGGGT  
41001 GTGTCTGTGA GGGTGTGTGA GGGGAGATTA ACATTTGAGC CAGTGGACTG  
41051 GAGAGGAAGA CCCACCCTTA ATCTGGGTGG GCACCATCCC CTTGGCTGCC  
41101 AGCACGGCTA AAAAAAGCAG GCAGAAGAAG GTGGAATGAG CAGACTCGCT  
41151 GAGTCTTCCA GCTTTCATCT TTCTCCCGTG CTGGATGCTT CCTGCCCTCC  
41201 AACATCAGAC TCCAAGTTGT TTAGCTTTTG GACTCTTGGA CTTACACCAG  
41251 TGGTTTGCCA GGGGCTCTCA GACTTTTGGC CACAGTGCAC TGTCGGCTTC  
41301 CCTACGTTTG AGTTTTTGGG ACTTGGGCTG TCTTCTTTGC TCCTCAGCTT  
41351 GCAGATGGCC TATTGTGGGA CACCTTGTGA TCATGTGAGT CAATACTCCT  
41401 TAATAAATTC CTTTTCATAT GTACATCTAT CCTATTAGTT CTGTCTTCT  
41451 CGAGAGCCCT GACTTAATGCA GTCATGGAGG CTGGCGTTTG TACCCAGGGT  
41501 CTCCCAGTCC CCAGGTGCAT GCTCAATGTG ACAGGGCTAG TTAGTGCAAA  
41551 GCCGGCACTA GAATCCAGGT TCTGGATTTT CTTCTTGGTG TTCTTCTCTC  
41601 TAGACTTGAG GTTTTGAATT GTGTTCCCTGA ATCTTTTGGG TCCTAAAAAA  
41651 GTCTTGGGAC CTGCTGCAGG GGTTGAGAAG AAGCAAAGCT CATGTGACTC  
41701 TAGGCCCTTA CTCCAAAGTC CAACCAAGTA GCATGCTTTG AGGTAAATTA  
41751 TATTGTGTTA AACTTAATAT ATGATACATA GTATAATGCA ATACTTAATA  
41801 TATATTTAAT ATATTTGTAA CATACAAAAT ACAATATCCA AGAGCAGTAT  
41851 GGAACACCAA AAGGTGTTC AACTTTTTTT TTTGAGACAG TCTCGCTCTG  
41901 TCACCAGGCT GGAGTGTGGT GGTGCAATCT CAGCTCACTG CAACCTCTGC  
41951 CTCCCTGGTT CAAGCAATTC TCCTGCCTCA GCCTCCTGAG TAGCTGGGAC  
42001 TACAGTGCC CACCACCATG CCTGGCTAAT TTTTTTTTGT ATTTTTGGTA  
42051 GAGACGGGGT TTCACCATGT TGGCCAGGAC GGTCTCGATC TCTTGACCTC  
42101 GTGATCCACC TGCCTTGCC TCCCAAAGTA CTGGGATTAC AGGCGTGAGC  
42151 CCCTTCCTTC AAATGGAATT TTATATCTGT GTTTACATTT TCTGCTTAAA  
42201 GTTTGAATTT TGTTTTAATTC AATTGAATTT CCACTTAAAA TGTAAACTTT  
42251 TGAAACCCAC ACCTCTGACA TATTCCACAT TGCTGTTGGA TATTTTtagT  
42301 TTAAAGATTT GGCCTGTAAG CTGTATCGGT ATCATTATTC TAACCTCAGG  
42351 CTCAGGTCT CAGTCACTAG TTAAAGTCTT TTCTACCGGC AAATCTGTAT  
42401 TACCATTCT TGTGGAAGAT AACCTCTAAA GTGCCCATGT AAGCACAAAT  
42451 CCATAAAACT AAAAGTCAAA GAAAAAAGAG AAAGAGTTTA TTCCACTGTT  
42501 TAAAAGTTCA GTTTGATTTA GATCTTATAT CTCTTGGGTT TTCTTGACTG  
42551 ATTTTTTACA TAAATGTGTC CCAGAAAGAG TGATCATATC GTGATCTTTG  
42601 TTCCCAGTTT TCCTTTTCCA CATCAAGTTT TCCTGATGGA AAGTGATTTA  
42651 AAAAAACCTT TAAAGTGTGA TAATCACTCT CTTCTTTAGT AGACAGTGGA  
42701 GTTTAATAGA TGCATACAGC AGTTGTTTAC TTGTGATGAA AAGAAATGTG  
42751 AATTTTCTGG TGCAAGGACA TTTCTAGCT ATGTCTAAAT TGCAGAGAGA  
42801 CCACAGTTTG ACATAGTGCT GAAGCAGGTT GTAAGAGGTA GGGGTACAAT  
42851 GTATGTCTGC ACAGGTTGTG CACTATGCGA CTGTGAATGG TGTCTTCTGG  
42901 AATTGTCTAT GCGGAAGCAC TGTCAGGAGG TCGTGGATTC CAGCCTCTGT  
42951 TGATTTTGTG GCATGGGAGA GCTTGATACC AAGCCTCAAA GTACTAGGAA  
43001 TAAGAAGGTA TTACATGCTG TAATTTTCAA GGTGGTGCCT TTCTGTACCT  
43051 CCATTGCTTT TAGTTTAGGG CATTCTTCTT GCAATCTTTG GAGGGTTCTT  
43101 AGGAATAAAA AAGTAGCTAG TTTGAGACAG TGTGCAATTG TGCTGAAATG  
43151 GAGGACCATG GGGGTAGATG TAGTTCCCTT CATGCCAGTA GCTAATTGGC  
43201 TTAGTTTGCT GATTTGTTCC AGGATATTCC CTAAAAATAG GTGTCTTCTA  
43251 AGCCTCAGCT TTGGGCCTTG AGGTATGGCA TGGCTATCCG CTCTCTGCTC  
43301 CTGCTGAGCT AAATGCAGTC CTGAATGCCA AATATTGAGA TTTGGAATTA  
43351 TCAAAGGACT ATTAGCATCA AATTGAGAAA CTCAAGCTAA ATTTGCAAAT  
43401 TAATACAAAA TCATGAAGT AGCTTCTCTT CCAGAGAACC TCTTGTAACA  
43451 GAACCTGAAG GTGGCAGGAT GTCTTGATAG AGCGTGGATT TTAGAGCTGG  
43501 ATGCATGCTG GGCTTATATC CTGGTTCCAG CATTTCCTT GGGCAAGTTA  
43551 TTTACAACCT CTGGTTGAGG TGGTTGGACT AGTTGATATC TATGATTCTT  
43601 TTTTAAGTAA ATAACATTA GTTTTTTCAT ACAGTATAAT TACTATATAA  
43651 CAAACATCTT CTCTTTTGAT TTCATTCTAT CATTCAAAGT ATTTATTAAA  
43701 TGCCCTCCAA TGCCGGACAC CATACTAGGT ACTGGGTATA TAAGAGTGAA  
43751 CCAAATGAGC AGGGTTTCTG CCTCAGGGA GTTGATAATC TAGTGGGGAA  
43801 GGTGTTGGGG ATGATGGTTC ATCAATAGTA AAGAAACAAA TAATATAACT  
43851 ACAATCATAC TTGCTGTGAT AGAGAATAAT GGGGAGGACC CTATGTATTA  
43901 GTGGGGGGTA CTCTAGAGAA ACAGAACCAG TAGGATACAA ACACACACAC  
43951 ACACACACAC ACAAATGTGT CTTGGGTATA TATATATCTA TATGAGAGAT  
44001 ATATGTATAT ATGTACATAT GTATGTGTGT GGGGGGGATG GGGGATATAT  
44051 ATATATATAT ATATGGAGAG AGAGAGAGAG ATTTATTTAT TTTAAGAAAT

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44101 TGA CT CACAC AATTATGGAC AGGTCCCAAG ATCTGCAGGT GAGTCAGCAA  
44151 GCTGGCGACC CAGGAGAGCT GATAGTTTAG TTCCAGTGCA AGTCTGAAGG  
44201 CCTGAGAACC AGGAAAGCCA ATGGTATAAT TCCCCTGAAA AGCCGATATT  
44251 TCAGTTTCAGG TCCAAAGGCA GGAAGAATTC TCTCTTACTC AGGGGAAGGT  
44301 CAGCCATTTT GTTCTATTCA GGCCTCCAAC CGATAGGATG TGGACCACCT  
44351 ATGTCGTGGG AGAAATCTGC TTTACTCACT CTGCTAACTT AAATATGAAT  
44401 CCCATCAGAA AGCACCCTCA CAGAAGTACC CAGAATAATG TTTGACCAAA  
44451 TATCTAAGCA TCCTCTGACA CAGTCAAGTT GTCACATAAA ATGAACTATC  
44501 CTAGGCTACT TAGAGTAGTC AGAAGATACC TCTCTGACAT GGTAACATTT  
44551 AAAC TGAGAC CCAAGGAATG GGAAGGAGCC AGCCGTGGAA GAATGGGGGA  
44601 CAGGCCTTCC AGGCAGAAAG AAAC TGAGTG GTAACCGAGT GGAAACTGAA  
44651 TGGAAACTGG AGTCCAGAGG GAAAAGGGGC ATGTTGTGAG ATGAAATTAG  
44701 AGAGGGGACA GAGGCTTTAC TGTCAGACCT TGGAGCCAT GATAAGGGGC  
44751 TTGCATTTTA TTCTAGATGC AACGATGAGA GGCAGTGAG TTGAGCACCT  
44801 TGGAGCCAT GATAAGGGGC TTGCATTTTA TTCTAGATGC AGTGATGAGA  
44851 GGCAGTAAA AGTTTGAGCA AGGAGGAATG TGAGAGGATT TATGTTTCGA  
44901 AAAGATTTT CTGACTGCTC TGTGGGAGTG GGTGAGAGTG GAAAGTGGGG  
44951 AGACCTGAGA GAAGGCTATG GCTGGAGCCT AGTAGGGAGC AGGTAGCCTG  
45001 GATGGAGGGC CAGGGGGACA GAGGGAAGTG GATTGTTTGC AGGTCTATTT  
45051 TGGCGGTAGA AATGAGAGAA CTATTGGGGA GGGACAGGAC AAGAGAACAG  
45101 AAAGTAAGGC TGCCTCTCAG GATCCTGCCT ATTTGGCTTG AACGGTTTGG  
45151 GTGAACATTA CTATCATTCG GGGAGGTGAG ACTTCCTTTT TTGGTTGGGT  
45201 CAAC TAACAA CGCAATTTT CACTTACTAA GCATGAGACA CACCTGAGGT  
45251 ATCCAAATGA AACTCAATAG TAGGCAATTG GGTGTGTGAA GCTGGAGTTC  
45301 CAAGGACATT TTGGGTCTGG GTGTATAGAC CTGGGAGCCA TCAGCATGTA  
45351 GGTAGGGATT ACACAGGGAG AGGATATAGA ACAAAGGGG TGCAGAAAAT  
45401 AACCCACGGA AGTCCAGTGT TTAGGCAGAA GAAGAAGTAT CTGCAGAGTG  
45451 GATTTAAAAA GACCCAACGA GAGAGGGTGG AGGAAAGCCT TGAGAGTGTG  
45501 ATATCACAGA GGCTGTAAGC AGGGAGCTTT TTAAGAAGGA GCAAGTTCTC  
45551 CTGTGCAGAA TATTGCTGAG AGGACAAGTG ATGTGTGGCC GTGTTGGTGT  
45601 CCCCTGTGTC GGTAGCAGAG ATCGTTAGCA GAGCAGTTTC AGTGGAGTGA  
45651 CAGGAGAGGA AGACCAGTAG ATTTTATGCA GTTTTAGGAT GGGTATCACC  
45701 CAGTGTATTA GTCCATTTTC ACGCTGCTGA TAAAGACATA ACCAAGACCG  
45751 GGAAGGAGAG GTTTAATTGG ACTTACAGTT CCGCATGGCT GGGGAGGCC  
45801 CAGAATCATG GTGGGAGGTG AAAGGCACTT CTTACATGGC AGCAGCAAGA  
45851 GAAAATGAGG AAGAAGCAAA AGTGGAACC CCTGATAAAC CCATCAGATC  
45901 TCATGAGACT TATTCGTTAT CATGAGAATA TCATGGGAAA GACTGGCCCC  
45951 CATGATTCAA TTACCTCCCC CTGGGTTCCCT CCCACAACAC ATGGGAATTC  
46001 TGGGAGATAC AGTTCAAGTT GAGACTTGGG TGGGAACACA GCCAAATCAT  
46051 ATCACCACGT TTAGTACTTC ACTATGTTT TGGCCAATTA TGTTGGGTAG  
46101 GGGATGGTTG TGCTCCTCCT GTCCCTTACC TTAGAGCTGG CAGATAAAAT  
46151 ACCAGATATC CAGTTAAAT TGAATTTTCA AAAACTTTTT AAAAAAGTAT  
46201 AAGTATATCC CAAATATTGC ATGGGATATA CTTACCCTTT AAAAAATTTA  
46251 TTGCTATTGT TTATCTGCAA TTCAAATTTT ACTGGGTGTC CTGTATTTTT  
46301 GTTTCCTGAA TCTGGTAGCA CACATTGAAT TGCACCCTTT AAAATGGCTA  
46351 GAATAGGGAA TTTTATGTTA TGTGCATTGT AACACACACA CACACACACA  
46401 CACACACACA CACACACACA CGTATCTGGC AATTCTCCCT TAACTAACT  
46451 ACCATGTAGA AGCTACCATG CGATGCAGTC TATTTCTAGG TTTAGCCACA  
46501 AGGGTCAATA AGAAAATCTG ACCTCAAAGG AAATTATGTC TGGTGATGGT  
46551 TAATGCTTCT ACTAAATTC CTTAGAGCAT AGGATGCTGA GCCCATAGTA  
46601 GGACCTCATC AAATGCTGGT TTGATAGAAA TTGCATTTGG GGAAAATTAG  
46651 CAGCTGTTGA TAACTGAATG GAAAGAAATG AACTACCCTG GTACCTGTGG  
46701 TACAACTTAA AGAACACCAT GAAATGGGCC TCATGGGAGG TTCTCAATGA  
46751 ATTCAGTGGC GTGGCACTTT TGGGCATGCT TTTGGAACCA AGTACTTACT  
46801 CCATGTGCCCT GTGAGTTTGG CACCTCTCAT GGCAGCCCCA GTGCAACTGG  
46851 TTTCTGAGGG GCCATTAATA ATCTCCCAAT GGCAGACAAC TCTCAGACAT  
46901 GCCTGCAAA TCCAAGACAG CCAGGCTGAT CATCTGCTAC TTTAATTGGT  
46951 TATACCAGTT TTTATGCCTT TGTTTCTCCT CCTTCTGTG AGGTGGAGGA  
47001 AACATAACCA CAAGACTGTT TCCAGTGACC TCTTCAGAGG CAATTTCCAA  
47051 GCAATTAAGT ATGGGTTGAA TCCAAAGTGT ATTGATGAAT TAAATCTGT  
47101 TCCTTGGCTG AAGATTCTGT TCCTTGGCTG ACACCTGAAC TCAAAGGTTA  
47151 GATTGAACTA TCTAGGAAAA CGGTTTTTCT CTTGTGTTTT CCTGCAGGCT  
47201 TTGCTGTTTA CGAAGATCTT GCATCAACAC TTAGCATTCA CTCACATGGC

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47251 AAGCTTGCAT GTGGTACTTT CATTCCACAT TAATTTAGGG AACTCTACTA  
47301 TGTGCCAGCA TTCAATATCC AATTTGTCTT AGATTTTCGA ATAGTGTCCC  
47351 ACAATTTTAT AACTGGGGAG TTCCTTGAAT GGAAATATGT TCACAGTGGC  
47401 TGCTTAATTG TGACTAACCC ATCACATAGA GACTGCTTTG GTAATAGATT  
47451 TGATTCTGAG GGTCTAGGAG AAGGGACACT TCTCATATGG GGAAGACGGG  
47501 ATTAATCCTT GAAAAATGATA CTGAAGCCAA CTTCTGTACC AGTATAGCAG  
47551 CTTAGCAGAC TTCTATATGA TCCATGTAAG GGTCTGTTTG CTCTCTGAGA  
47601 TTTTGGGTGC CTTCTCTAGC CCCTGAGTGC TGGGCTTCTT CTGAATTCCA  
47651 TAGGGTGGA GGTGAAGGTA CCGCCAGCTC TCACCCAACT CATCCATCCC  
47701 TGGACAGCAG GGATTTCTGCT CATCACCTTG GTGCCTCCGA TGCCTGAAGC  
47751 ACAATAGGCC CTCAGCAAAC ATTTGTTGAA TTCATGCCAT GAACATTAAT  
47801 CGAGCCCTTT TTATACACTG TGCCTGGGA TTGGGACCAT GGAAATTTA  
47851 GAGAGGAAAA GGTCCACCTT CAAGGGGCAT CTAGAGGAAC TTATCCTCTA  
47901 GCAGGAGAAA TTGCTAATGA GAAAAGGTAT TTTGGGGAGT GGAGTGAGGT  
47951 GTTGGTCTAG CTGGCAGGTT CAGCCTATGC TCAGTGGCTC TCTGGTATGG  
48001 AAAATTCCTC AGAATGTTGA TTCAGCCAAA GATTTCCTG GCAGCACTGA  
48051 CTCTTGCTT CTTTCGCCA CATTTTATTC CCCAAACCTA GGTGTTACTG  
48101 GGAAGAGACT GAGCTGTTTT ATTGAAGATA ATTGACTTTC CCAGTTTTTA  
48151 AGTAAGTCTG TTGATTCCTC GAAGACTTCA CTAATCAGAG TTATGAATAT  
48201 TTCAAAAAACA CTTCCAGTTC TTCAGATGAA TGGATTTGTA GGTTTTCTAC  
48251 ATTGCTGTCT CCCTAGCCCC ATGAGGAATA ATGTGGGTAT CCTTTTCCCT  
48301 TTTAGGTTTC TCTCTTCTC TAACCTGCGC CCACTCCCAG CCTCTGATAG  
48351 ATGCATTTGC AGAAATGTG AGAAATGTG CTGATGTCAG CAGCACTGAT  
48401 ATGCATTAGA GGAGCCACTT CAGAGGAAAT TACTCAGAGG GTGATGCTGA  
48451 AATGCAAAGC TGTTTGGTAG GGTATTTTGT AGAAACTGTT TTCTCCCTTT  
48501 GATGGATCTT GTTTATTTTT TTTTGAATTA GTAGGCACAG TGAAGGAATA  
48551 ACCATCCAAA TGTTTTTTTT TTTTCCATTT AAGTTTGTGA TAGGAGGTTT  
48601 TGGTGACTTT GAAATGAACC AGGAGCACTG AGCAGCTACA CTGACAAATG  
48651 GAGATGGCTG AGGCTGCTTG CAAAGCAGTG TGTGTTGGGTG TGGAGCCTCC  
48701 ATGTCACTGA CCTGGGGAAA GGCAACAGTG AGGGCACACC TCATTCTACA  
48751 GAAATGGTTT AAAAATATAC ATATGATACC CCACTTTTGA TGCACACAGA  
48801 CTGTGCTGTT TAAATGCTTT CGATGGAAAA TCCTTTTGTA AAGTACACGT  
48851 CTATCTTGCA GAGTAGGATT TCTGTATATG ATCTCAGGTT TGTTTATAGG  
48901 GAGGTACACT TGGATGTCTT CATGACATTT ATCATGACAG CTGTAGCTGA  
48951 GCAGAGAAAG AGGGCAGGAC TGCCATGGGG CATCAAGGGC CATTTGAAGA  
49001 AGGAAATGGT GACTGAGAG TGATAGCGAC CTGTGAGGCT GCCTGGTTTC  
49051 TGTAGCAGTG TTCAGCAGCC TGTGACTCTG AGCAGAGAGA AGGAATATTA  
49101 TACAGGGATA TTTCCAGGTA GCTCCAGGAA AAGACAAAAG GGGAGGAAGT  
49151 TGAGTCTGTT AGCTAAAGAG CAGTGTGTA TATGGGATCC AAGTTGGGTG  
49201 GAGAAGAGAA AGAGAACACA GGGAGGGTAG GATGACAGGA GAAAGTAGAG  
49251 GCAGGGTATG ATGTGGGAGC GATGAGGGTA GCAAGCTGGA AAGAGAGGAT  
49301 GATCTAGTCA ATGCTTTAGT GTGCCTTAGG GCTACTATAA TGAAATACCA  
49351 TAGACTGAGT AGCTTTTGCA CAACAGAAAT TTATTTCTCA TGGTTCTGGA  
49401 GGCTGGGAAG ATCAAGATAT CAAGGCAGAT TCAGTGTCTG GCAAGGATCT  
49451 GGTACCTGAT TGACAGACAG CTGTCTTCCT GCTGTGTCCT CACTCGGTGG  
49501 AAGGACCAAG AGATCTCTCT GGGTTCTCTT TTATAAGGGC ATGAATCCAA  
49551 TTCATGAGGG CTCAGCCCTC ACCATCTAAT CACCCCCCAA AGCCCCCACC  
49601 TCCTAATCCC ATCACATTGA GGGTTAGATT TCAGTGTGTG AATTTTGGGG  
49651 GACACAAAAA TTCAGACCGT AGCAGTAATC GCTTCAACTG AGTATTGAGA  
49701 CAGTTCTTGT GGTAACAAGG TTTAGGGTGT GGCCATAGGG AGACTCAGCT  
49751 GTAGTGGAGC TGTTGGGGCT GTGCCAAGGT CACCCAGATC CGTTTTGTTC  
49801 TGTGCACCTG TCCTTTAGCT TCTGGGGGCT TCTCTCTTTC TGGCCTGTAC  
49851 CTACAGCCTT TTTTCAGAGGA CTCTCCTTGG TCTACCGGAG CCTATTTTCA  
49901 GGATGTTCTT AGGAGTTTTT TGAGATGGAG TCTCCCTCTG TCGCCCAGGC  
49951 TGGAGTGCAG CGGCACAATC TCAGCTCACT CCAACCTCCA CCTCCTAGGT  
50001 TCAAGCCATT TCCAGCCTC AGCCTCCCAA GTAGCTTAGA TTACAAGCAT  
50051 GCACCACTAT GCCTGGCTAA TTTTTTTTTT TTTTTTTTTT TTTGTATTTT  
50101 TAGCAGAGCT GGGACTTCGC CATGTTGGCC AGGCTGGTCT CAAACTCCTG  
50151 ACCTCAGGTG ATCCCCTGCC TCGGCCTCAC AAAGTGCTGG GATGACAAGC  
50201 ATGAGCCACT GCGCCTGGCC ATCCTAGGAG TTTGTATCAC CCACTCCTTC  
50251 ACGGTTTGTG TGGAGGGATC TCCTAAATAA ATAACTCACA AACAAATCT  
50301 CATCCGGGAT CTGCTTCTGG GATACCTGCC CTGAGTTAGT GGTGAGATG  
50351 GAATGGAGAT GATGGCAATG GTGATAAATT CAAGGAAATG GGAGGCTTGG

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50401 GTCTTGGCTG GGTGTGTGT GGGATGCTGA AGTCACTTAG GAGGGAAACA  
50451 GGACCCAGAG AGAAGGCTGC AGGAACTGG GGGAGCAGCC AGGTCTACCA  
50501 CTGATGGCCA CGGGGAAAGA GTAGGAAGTG GAGGAGCCAG AGGGCTGGGG  
50551 TCTCAGAGGA ACTGTCGGGT TTGACACAAG AATT'TGGGGT ATTGGTTTTC  
50601 CAGGACAATG TGACCCTGAT GTTGTGGGCG AGGGAGACTG AACAGCCCCT  
50651 ACCCCAGAGT CACACTGACA GCACAGTGTC CTCAGGGAAA GCCCAGGTAT  
50701 CAGGAGAAAA GGCGCAGGAA GGGGCCCTGA AGAGGTCTGGG GGCATGAGGG  
50751 AGTCTTCAGA TCTTCAGCAG GGGCCCCTGA GGCATCTTTG GAATGGTTTG  
50801 GGGTAGGGGT GAGGGGAAGG TTGGATCAGA GGGGAGGAGG CTGAGAGCAG  
50851 AAGAGAGAAC AAAGCTACAC CAAGTGGCCT CACTGGCCTC ACACTTCTCA  
50901 GAATTGGTCC CTTCAGACCC GGTGGTGGGT GGCTTGGCAG CCTGGATGTG  
50951 GGGTGTGGAG ATTGGTACTA CTCCTGGCAC ACAGGGGGCA TGCATTGGTT  
51001 GAATAAACAA ATGAATGACA CATCAAGTTT GTAGATGCCC CACCTTTTCA  
51051 TCATTCTGAA CCATTGTCAC TTCCATGTAT TTTATGGTCT GATAAATATG  
51101 GAATTAATCG AAGTACCTCT AGCTATTTGT TATCACCATT ATTGGGTGGG  
51151 ACACAGCGAA CAGATTCTT AAAGCTAGGG AATTATGCAA TAGGACATGT  
51201 TACGGAGCTTA AGCCATAAGA TCCTTTTTTT TTTTTTTTTT TTTTTTTTTT  
51251 TTTAGATAGA GTCTCACTCT GTCACCCAGG CTAAAGTGCA GTGGTGCAAT  
51301 GTCGACTCAC TGCAACCTCC TCCTCCCAAT TCTCCTGCCT CAGCCTCCTG  
51351 AGTAGCTGGA ATTACAGCGT GCGCCACCAT GCCTGGCTAA TTTTGTATT  
51401 TTTAGTAGAG ACAGGGTTTT GGCATGTTGG CCAGGCTGGT TTGGAAAGGA  
51451 TCTTTCTAAT AGGCCAAAA ATATTTTTCA GTTTTGCTTT CACTGTGGA  
51501 TCTGTAGATC CACAGTATAA CTACTTATGG TCTATTGTG TGTGATTGCA  
51551 GATACTGAAG GAGTTTGCTG GGAAGGGAGA AGTGTGTGTG GAAGAAGAGG  
51601 GGAGGGCTGG AGAAGTGAGA TGAGCCCTGA GCACACGGGA CATTGGAGGC  
51651 CAGGGAAAGA ACCATGGCGG TGCTTGTGGA GTTTTAATAG GTGCAAGCTG  
51701 GGAATTTTCA AAGGCTCACC TGGCTGCTGA GTGGAGCCTA GGGCAGGGTG  
51751 GGGGGTGGGG GGAGACCCCT CCGGGAGCCA GTGAGGAGAG ATAAGTCTT  
51801 TTGACAAGAC ACCTGGGAAA GACATCTGGA AGGAATGGCG TTGACAATAA  
51851 GATTTAAAC CCTTGGCCCC AGGGAAAGGG GATATTTTGA GAACTATGAC  
51901 TGCTTGTATT ACTTTTAATC CCAAGAGGAG GATAAAGGTC TTTCTGTAT  
51951 AAAGTGCCT AGTTAATTTA AATTGTGGAG GAAAAACTT AGGGCAAGAG  
52001 ACAGAATATG ATATTCAGGA AGCATT'TTG AAAAAAGAC AAGGAACCCC  
52051 AGCTGTGGCT GTGTGCACCT TTAGGGCCTT GATCATGGAG GCAGGATAAA  
52101 GAAGTCCATC TCGTCAACAT GGCGGAGTCA GAGTCTATTG GGAGAATCAC  
52151 GAGGTAGGCA GCTCTAAATC CCAAAGATG GTGGTCCAGT CGGATATGCC  
52201 TGGGCTGCTC TGACCAGCTC AGCACACACA AGGAATAGCT CTGGTCTGG  
52251 GCAATTTGTG CCCTGGGTCG GAGGGTGAGA GTTTATTTTA TCGGAACAAT  
52301 AAAGGCATCC CACCTGCTAC CAGGAGCAAC CAAAAATGCT CAGAAGTTCT  
52351 GGAACAGGAG TGCTGTTGAA CAGGGTTTCC TGGCAGCCCG AGATAGAAAG  
52401 TGGTAAAAAC AGCAAAATGC TGCTATGGTA TAGTACTGAA GTCATCAGGC  
52451 ACACACTGAG ACTTCTGTG GGTGAGCCTT TGTGAATGGT GCTGGAGACA  
52501 GAGACTGGGA TAAGATCTAC CATCTCTGAT GCTGACGCC AGCCAGTTT  
52551 TCCCCTTTTC CTCTCTAGTT TTTTCTTTCT CTGTCTGCA TCCCCCTCCC  
52601 TTTGCTGTCC CTTAAATGTT GCTCCCTTGA GCATCATCTT TTAATCTCTT  
52651 CTCATTTTAC ATCTCCCTCT GGACCACTT ATCCAGTCT GTGGCTTCAG  
52701 TACCATTAC ATACTCATCA CTCTTAAATC TAGGGATTCA GCTAGATTAT  
52751 TCCCCTGAGT TCTGGTCCCT TATGCCTCAT GTTAACTGGA TAGTCCACC  
52801 TGGATGGGT ACAGGAGCTG CACACCTAAC TCTCCTGCAT TTTCTGTCTT  
52851 GCAGAGCATG ATACTGTTAT AAGCTTATAA GAGTCATCCC AGACGCCTCC  
52901 TTTCTTCTT TGCATCCATC ACTAGGACCC GCACATTTTA CTTCTTAAC  
52951 ACGCCTTGTC TCTGACTCCT CCTCTGCTGC TGCCTGAGTT GAGGCCTCAT  
53001 AATACATTCC AGTAAACTCC TACCCACACC CCCCACAGAC GATCTCTCAC  
53051 TTGCTGCATG TCTCTTACGC ACTGCTGCCA GAGTCAGCTT GCTAAACCCA  
53101 GGTCTGACCC CCTGGCTCTT CTCCCTGTGT TAGCCTTGAT GGCTTCCCAC  
53151 GCTCATTAAT AAGACCAACA AGAGCCACAC TCTCTCCTCT GCTTGTCTTT  
53201 GCAGCTTTAT TTTGGTGTAG CCATCTTAC ACCCTCTAGT CCTGACACGC  
53251 AGACCTGAGG TAATTTCCCA AATGCCCCAG GCTGATTAT GGCTGAGTGT  
53301 CTTTGTATCT GTTGCCCCC CATTGCTGTT CCGCCTTCCT CTCCACCTCC  
53351 TTCTGCCCTC TCGCAGACAC CTAATGCCCT TTCCACACCA GTGGGCACCT  
53401 TGTCTTTGCA TTCTCGTCTC CTCTTCGGTG GCACTGACAC TCTCTCTTCA  
53451 TGTCTTTCTG TCCCCACAC CTCTGTCAAA CACAGCATCT GCACGCTTTG  
53501 TTGCATTTGC TTGCATAGAA CACGTAGTTT TCTTACCTC CTAATAATGT

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53551 GGACAGCTCA CGTTGATTGA GGACTTGCTT TGAACAAGGC ATTGAGCAAC  
53601 ATGCCCTGACA TTTTATGTTA AATCTTCCCA ATAGTGCTAC TGCTTCTGTC  
53651 CCTTTCCAGG GAGGAGGAAG GAGGCTTGA GAAGGGACTG TCTTTTAGGA  
53701 GCCCTGCCCA GTGTTTCTG TGGAGGGTGG GGCCATCGTG GAAGACAGAC  
53751 CTATGGTAGG GGTAAGCTGG GTGGCTGTTG AAGTCCAACC TTCCCCCTTC  
53801 TTCCTCTAAC CCTGATAACC TTGTTCTCTG GGGCCTGTCT GCTAGTGGAG  
53851 AGGCTTCTGA CTTTTTTTTT TTTTTTGCCA TACCTTTGGT TTATAAATAC  
53901 AAGAAGAGAT TTGGGGGAAA ATCAGGGGAA ACTGTCGAGC TTACAAGTCC  
53951 CGAGAAGGAA GTCACTGCTC CTTTAAGTCT CATGTGAACC CCTTGTCTC  
54001 TCCCCAGCTT GTGGGTGAA AGAAAAGCCC TTTAGTCTTT TGGGTCCCTCA  
54051 AATCACAGTT TATGCAGTTT GGCCCCAGTC AGAGGGACCC CAGGAAGGCA  
54101 GACTCAGGGT AAATTCTGCC TGTCTTCCAC CAGAGAGGGG ACTCACCAAG  
54151 TGTGACTCAT GCCATTCAAT AGAATTTTAA AAATCTCACA AGTATTTTGT  
54201 ACCCCTGAGT AAAAGAGAGG CTTGTAGCTC TTCATGAAGG AACAAGAAAG  
54251 GCCCAGACTG AGTGTTTGGA GCCCAGTGAA GTAAAATACT GCCCTGTCTC  
54301 TTGCTGTGCC ACTCTAGCGC TTGTACAAAC CATGAAGAAC TCTCTTTGGA  
54351 CTGTTTGTCTT TTTGAGAATG TTAACACCTT GACTCTGGAT TTCTGCCTAT  
54401 GGGAAAAAAC CACAATAGTG CCAGGGGTGC TTCCATATGC AGGATTAACT  
54451 CTGCAGTCAA AGTTTCTGTT GGGCAGGTGT GTGAACCTGA TATCATAAAT  
54501 GCTGGCCCAA AGCAAATGGG AGAATGGATG AATGAACAAA TTCAGGAATG  
54551 AAACAACTG TAACCAGGGG TCTCCTAGTT GTAGGTCTC TGCTAAACTT  
54601 CATATTGAGA CACAAAGGAA GGGCATCTTA TAATATAATG TTGGGGGATG  
54651 AGCAGTACG TTGGAGGTGG GGACACGTAA GGTGGGTTT GATGTTTGAG  
54701 AAGGAATTGA CCAAAAAAG AGTCAAGAGG TGAGAAGAAT CTGGGAAGTG  
54751 AGACCTGTTT CTCTGGGACA GGTGTGAGCG GGTCTGGGTG CTGCTGGGTT  
54801 TGGCTGGGGC AAAGGTTGCT TGTGGGGCG TGGCAGTGGG TGAGGCCTGT  
54851 GAGATAGGCA GGCGCCAGGT CCTGGAAGGG AGAGTCAGGG AGCAAGGCAT  
54901 GGAGCCTGCA CTTTACTCTG AATGTTGGTG GCGCCTCAG AGCATTGTGA  
54951 GCAGGGGTCC ATGTGATCAC ACTGACACCT GAGAGAGTGA CACACCATGT  
55001 ACATGGCTGG TATATGGAGG ATGGATTAA GGGGGACAGG ACTGAAGGCT  
55051 GTCGCAGTGA TTCAGGTGAG AGAAGATGGG GTTCTGGACT AAGGGGACAG  
55101 GAAAGCACAG ATGTGAGATG AGGTGGCAGG CAGTTCTAGC TCCCTCTTCC  
55151 CCCAGTCTG CTTGTTTTC CTCTTCTCAT GGCTCCATAG GGTCTCAGTC  
55201 ATTTTCATCAT AGCTTGATCT CTTCCATCTG GAAGTGCAGC CTGAAATTTT  
55251 GAAGACAGCA GGGAGCAATG CTTACCCAA AGGGAGAGCC TCGGGTGGCG  
55301 TTTTGGGACC ATGGCTTGCT CTCTTAGTGC ATACAGACTT AGTGTACTG  
55351 CCATTCTTAC TTGGATCAGC TTGATTGCC TTAAGGTAGG CGTGTCCATG  
55401 GAAACAGGGA AAACATGATT TGGTTGTTG GGTATCTGGA ACCAGAGGCA  
55451 GCACAGATAC TGCTCTAAGA GCTGCTGGGA CAACTGGAGG CCGGTGTGGG  
55501 TGGAGCACCC GAGGTGGAAT CCTGCGCTCC TCATCTTCC TGCCCTCTTC  
55551 CTAACACCCT CCCTCCCCAG CGGCCTGAAG TCTGCCTATG CCTATGCAGG  
55601 CTGAGCTGTA ACCTGGGACT CTTTGGAAAG TCTGAGCCAT CAGTGCAGGT  
55651 GGCCCCGGAA TGATTCAGA CCTAGAGTAG GGGTGGGAGG TCGGCTGCGG  
55701 GGCGGGGGGA GGTGAGAGGA GGCTGTCTT TCCCTCTTGC CCGGGAGTCT  
55751 GCAGTCACAG TTGCATTG CTTGGGTCAG TAGCAGAGTC ACGCTGCTGT  
55801 GTGACAGTGG CACTGAGGCA GCTGCATTTC AGGTTTCAA GAGACTCTGA  
55851 ACCCTTGGA TGCCATTTGT TTCAGGTGAC ATGGAGGAAT GGAGGCACTC  
55901 GGGTTAAGTG TCTGAAGATG GATTCAAGGA TGCCCCTGCT TGTTAGCTTG  
55951 TCATAGGTTG CTCAGTGTCC CCTCTCTGGC CCGTAGTTTC CTCATCTATC  
56001 AATGGGGGCA GATAATAATC ATCACCTTAC ACAGAAGGTT TGGCGAAGAT  
56051 AAAACAGGT TCACTGGCTG GGTGCAGTGG CTCATACTTG TAATCCCAGC  
56101 ACTTTAGGAG GTCGATGCTG GCAGGTCGCT TGAGGACAGG AGTTTGAGAC  
56151 CAGCCTGGAC AATGTAGTGA GACCCCATCG CTACAAAATA TTAATAAATT  
56201 AGTTGGGCAT GGTGGCATAT ATCTGTGGTC CTAGCTACTG GGGAGGCTGG  
56251 GGTGGGAGGA TAGCTCAAGC CAGGAATTTC AGGTTACAGT GAGCTATAAT  
56301 TGTGGCAGC CACTTCAGCC TGAGTGACAG AGCAAGATCC TGTCTCAACC  
56351 AAAACAAAGC AAAACAAAAA CAGCTTCATG CACGTGTAAG ATCTTTGTTA  
56401 ATTCTTCCAT TAACCTCTGAA GGCGGGATGC GTCTTATTAA TTTATGTAGC  
56451 TCCAGTGCCA AATGCAGTGC CAGGCAAACT CAGTTGTTTG TTGATTGAAC  
56501 GAATGAATGG ATGGTGCAGT AATATCTGTG GGGCTTGAGA AAGCCTGAAT  
56551 AATGTCAACT TATTAAGAGC TTGTTCAACC ATGAAAAAGC AGATTTCCAC  
56601 ATGTACCCTT CCATATCACC CACATTAGG TGAAAATGAA ATATGTGCCG  
56651 TATTCTTTTT TTTGAGACAG AATTATCTC TTGTCACCCA GGCTGGAGTG

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56701 CAATGGCACG ATCTCGGCTT CACTGCAACC TCCACCTACC TGGTTCAAGT  
56751 GATTCTTCTG CCTCAGCCTC CCGAGTAGCT GGGACTACAG GTGCATGCCA  
56801 CCATGCCCGG CTAATTTTGT TATTTTGTAGT AGAGCTGGGG CTTACCATTG  
56851 TTGGCCAGGT TGGTCTCGAA CTCCCAGCCT CCCAAGTGCT GGGATTACAG  
56901 GTGTGAGCCA CTGCGCCCAG CCATGCAGAT ATTCTTGAGG AAACATTTTA  
56951 AAATGAAAAC TAGCAGAAAG GATATTACCT TTCAACATTT CCTTCTCAT  
57001 CAATTCTTGG CAGCACTTTT GCTGCCCAGT ACTCTTCTGT TGGAGCTGTG  
57051 AAGTGTGATA GGCCATTACT TTATAGATCC ATTCATTATT GATACGTTTT  
57101 GTAGGGAAGA ACTCCACTGC TGTTTGGAAA CTGAAGTAGT CAATCTCATA  
57151 GACTGGAAAA TATTTTAAAT GCCTATTGA AACAAATGTC GTTCCTATTT  
57201 TTTGGGATAA AAGGGCCCTT TCCCCCTGGA ATTGCTATGT TTCCTCTTTT  
57251 CCTGTTCTTA CACTCTGCAG AACTGACTTT GAAGTCAGAT GATTCCCTTT  
57301 TTAATCTGGC TTCTCGCTTT TGGGCCGCTT AACCTTGACT TAGCCATTGA  
57351 ACCTGTCTGG GTCTCAGTTT CTTTGTCTGT GAAGTGGGGC TGTGTTGGGC  
57401 ATGAGCATGC GCCTACAGGC CTCTAACTGG AGGGGGTGTT GGTGATCAGG  
57451 GCCCTGGCTG CTGCCCTGAT CTCCACAGCT GGGCTTGCAC TCGGGTACG  
57501 TTGCTCCCGG GCTGCTCCCA GCCAGTGTCT GTGCGCAGCA AGGATACCAC  
57551 GGCAGGATTG TTTCTGGGAG ACACAGGACT CCTCAGACAG CTAACCTCAG  
57601 CTCAAGAACT CTTTGATGGG CTTGCTAAAC TTCCTTAGGC TGGAAGATGC  
57651 TTACCTCCTC CTTCTTCTT TCCTTCCTTT TCCAGGGGTC AGACTTACTT  
57701 AGAGTCTAGT GGCTGTCTA GCCTCCCCAA CTCCCTATCA TTTTCTCTCA  
57751 CACATGCGTT CCCCTAATA AAATCCATGC ACATTTAATC CCTTCTTGGC  
57801 ATCTGCTTCT GGGGTCCTA CCTGGACTCA TGCAGTGTGA TAATTCCTTG  
57851 TAGTGAGGAC CGAATGTAGT GATGTAAGCA GAGTGTGTGT CAGAGTGACA  
57901 GCATGAGTAA GTGCCCAGTA GGCCATCAGG GCTCCTGTCA CCTTACCAC  
57951 CATCAGCACC ACCATCCTCA TCACCATCTG GCCAAGTTTG CTTCTTTGTT  
58001 GGTTCCAGGC ACGAGAACTC CAGTGGTTGA TTCCAGGTCA TGAGGCAACT  
58051 GTATTAGGGT GAGAACAAC GTGGCTTCTA AGGAGAATAA ATGGATTAAT  
58101 GAAAATGCCA TTTAAAAATT TATCCAATT GGCTGGATGC GGTGGCTTAC  
58151 GTCTGTAAAT CCAGCACTTT GGGAGGCTGA GGCGGGCAGA TCACCTGAGG  
58201 TCAGGAGCTC AAGATCAGCC TGGCCAGCAT GGTGAAACCC CGTCTCTACT  
58251 AAAAATACAA AAAATCAGCC GGGCATGGTG GTGCACGCCT GTAGTCCCAG  
58301 CTACTTGGGA GGCTGAGGCA GGAGAGTAGC TTGAACCCGG GAGGTGGAGG  
58351 TTGCAGTGAG CCGAGATTGT GCCACTGCAC TCCAGCCTGG GCGAGAGAGC  
58401 AAGACTCCGT CTCAAAAAAA AAAAAAGAAA AAGAAAAAGA AAAGAAATTA  
58451 TCCAATTGAA GCACAATCCA GATCCTTTTC TAGCCATTGA GATGTGCAGT  
58501 CTTCTTTGCC AAAACAACCA AGTCCCTTTT TAGTGAAATG CACAAAAGGT  
58551 TTTGTAACAT TCTGAGATCT GTGCCGGTAC TCCTGACAAC TACAAATATA  
58601 CTCCAGCCAG TAGACCAGGG CTGCTCATTT GCTGTTCTCTG AGAACCCTGT  
58651 GGACGTTTAG AAAAAAGAT GGCTGCTATT ATTCACATTT CACAGTAAGC  
58701 AAACAGAGAA ACTAAGTGAC AGTTTCGAGG TCATGCTGTC ACTGATGGAT  
58751 TTGGGACTGA AACTCTGGTT TTTGCTCTGG TGCTTTGGAA GCTCAGGCAT  
58801 GGGTGGATTG TGTTCAACT CTGCCCTAAT GGACAGTCTC TTCGCAAACT  
58851 GGCACCAGGA CCTGGCCTGA AGAGACGTTT CTCAAGCCCA ATTCTGCCCA  
58901 GCCTCAGGGA TGCTAGAAGC TTGGGAAGCA TCCATGATGC AGGTCACTGA  
58951 CGGAGTCCAG CCTCCACTCA CCTCCATGCT CATGCTATTT ATTGCATGTC  
59001 AGCTGATGAG GCTTTAAGCT AATGTTGGTT ACCTGGTGCT GTGGAACATG  
59051 TTCCTTAAGC TGACTGGCAA GCCCTGAGG CTGGGAGGGA CTGTGCCTTA  
59101 TCCCACCAT ACCACACCCC TTTGTGCCCA TTCAGCATTA AATAAATGTT  
59151 TGTTTTTGGAG AGTGCTGGTG ATTCCGATGG GGCTTTTGTG TGAAGGAATT  
59201 ATCACCACCA CCACCACCAC CACTGGAAAA CAACATTTGC TCTATGCCAG  
59251 GCACTATGCC AAGAAATTGA GATCCAATGA TTAAGAGATG AACTTTCTGA  
59301 CTCCAAGAAG TTGATAGGCT AGTGGGGAAG ATCAGCACGC TGGGCCTGCC  
59351 TGGAAGAGCC CAGGACGACT TCATAGAGGA GGTAGCTTTT GGCTGAGACT  
59401 AAAGAGGATG GGAGTTTTCC AGGCAGATGA GGGTGGGGA GGGGTTACTG  
59451 GCTGAGAGGA CAACACCTGC AAAGGTGTGA AGGTGTGAAC AGAGCACTGC  
59501 TGTGTTTGGAG GACCTGCTTT CAGTATTGCT GGAGTGCCAA ACTGTTTGCC  
59551 ATTTGACGCT GCTCATCCAC GTTGTCTGTG TGGTTTGGAT GTGCCAGCAT  
59601 TCCTTCCACC CTTTATTCAC TTATTCCACC ATCATTGATT GTCTACCCAC  
59651 CATGTGCCAG GTACTGTGCA GAACACTAGG GGTGCAGAGG TGAGGGGTAG  
59701 ACAGGGTGCC TGCCCTCATG GAGCTTTCAA TCTAATGGGA GTGCTGGACA  
59751 AGGGCACAGG CTGTATCAGC AGCACAGCAC AGTGAGTGCT GGGCAAGGGA  
59801 GATGTATTAG TCTGTTTTCC TGCTGCTAAT AAAGACATAC CCAAGACTGG

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59851 GTAAGTTATA AAGGAAAGAA GTTTAATGGA CTCACAGTTC CATATGGCTA  
59901 GGGAGGCTC ACAATCATGG TGGAGGGTAA ATGAGGAGCA AAGTCACATC  
59951 TTACATGGCA GCAGGCAAGA GAGCATGTGC AAGGGAACCC ACCTTTATAA  
60001 AACCATCAGA TCTTGTGAGA CTTATTCACT ATCACGAGAA CAGCACGGGG  
60051 AAAAACCTGC CCCCATGCTT CAATTACCTC CCACGGGGTC ACTCCCCCAA  
60101 GATGTAAGGA TTATGGGAAT ACAATTTAAG GTGAGATTTG GGTGGGGACA  
60151 CAGCCAAACC ATATCAGGAA ATCTGAACTA ATGGAGGGCA GATTCAATTC  
60201 CTGGGGCTTC CGTAGCAAAT TGCCACACAT GTAGTGGCTT AAAGCAGCAC  
60251 TAATTTATTA TTGTATGGTT CTGGAAGTCA GAAGTTCAAA ATCAGCCTCA  
60301 CTTGGCCAAA ATCAAAGAGT AAGCAGTACA GGTTCCTTCG GGAGGCTCTA  
60351 GGGGAGGATC CTTCCCTTGC CTTTTCCAGC TTCTAGAGGG ACCACATTCC  
60401 TGGGCTCATG GCTGCATCAC TCCAACCTGT GTATCTGTCC TCACATCCCT  
60451 TCTCTCTCTG GCCCTCCTGC TTCTTCTTA TAAGAACTCT TGTCAATATA  
60501 TTGAGCCCAA CCATATAATC CAAGATCATC CCCCATCTCA ACATTCTTAA  
60551 TCACATCTGC AAAGTCCCTT TTGCCATGTA AGATAACATT CATATATGTC  
60601 TTGGGGATTA GGATGTGGAC CTCTTTGTGG GCCATTATTC TACCTGCCCC  
60651 CAAGGCAGGA GGGGAGAAGG TGCTCCAGA AGTGATATTT AATATGAGAT  
60701 TTCTGGCTCA GAAGCAGGAT ACACATGGAA GCAGGGAGGC CCCTTGGGAG  
60751 GCTGCTGGGC TGGTCCAGGC AAGATGTGAC AGTGGCCTGG ATGAGGCTGC  
60801 TGGCCACAGG GGTAGGAAA GGCCCAAGGG ATGAAATACA GTGATAGGGC  
60851 AGAATGAATG GGAGATGTGG GCAGTGGTAA AAGAAAGCCA CCTTAGGCAA  
60901 GGCTCACCTT CTCGGCATCA ACAGGAGCAA GGGGGAAAGT GAATGCAGCG  
60951 TCTTTAGGGA AAGGTTAGCA AGAACATAAT GCCCAGGTTG CTGATTCTAA  
61001 CATATAGATC TTTCAATCAA GATTCCAGAC AATTTTGCGT TTGTGTAAAT  
61051 CTGAGGGAAA TTTAACATGG AGTGATTTTA TTGGATTGGA TAATATGCCA  
61101 TAAAAGACTG ACGTTCAGCT CGGTTTCCAA AGACAGAAAC TGATTCCGAG  
61151 GGCTTAGGAG GAGAGGCAGA TGTTTACAAA CTTAGATTCT TCTAAGCCAT  
61201 CACCTCTACA GCCAGGTGTT TTGAACAGGC AGTGACATAG CCTGCTCTTT  
61251 GACTTTTCCA ACAGTGATTG AGCAGTTTAA CTCCCTGCTG GAGTGGGACT  
61301 GTTTACCCCA CTTAGGGTAA TTAGGTTTAT CATCTACTAA TACCTTCTTC  
61351 ACACAACAGC CAGCCTGCAC CATGACAGAG ACTATAATAA GAGTTGGAAT  
61401 AATAAAGGGA GAACAAAACCT GAAGTGCAGT GGCTGTTCGT TGTTGCACAA  
61451 GACATTTCTG TGATGCATGA TAGCATTGCG TGTGCGTCAT AACCCCAAAC  
61501 TTCTTGCCAT CGCAGAAAAG CCTCCAGCTG AACCTATTTA TTTCCAAAGT  
61551 AATGAAATTG CCCTACAGAG AACAGGGACC TTAGAGAATT CTATGTGCTT  
61601 CGAAAACCA GAAACAGTTT TTTTCCAATG ACGTCTTATT GGAAAACAAT  
61651 AGAAGAAAAA TTTATTACT AGTAGATCAG GAGTGGTTAT GCCTAAGTCA  
61701 CATCTTCTAT TAAGATATAA CAAGCTCATC CTTTTTTCCT TTGTTTTGTG  
61751 ACAAGAGGAC TTTTAAAGTC TCTAGACATT CATCTCTTCT CTGCTGTTGG  
61801 TATCACCAGC CTTTGGTGCT TGGATAGAGT AGTTGGTTAT CCCTCTCCTA  
61851 TTTACTTCCT CTCCAAGTTC AACAACATGT TTGTTTTTAA ATCTGATGAT  
61901 TTGTTGTATT CTTTACACAT TGTTTCAACA AGGAAGCTAA GGGAGGAGGT  
61951 GAATTATAAA TGGCAGAGAG ATAGCTTTCA ATTTGGACCC TCGTAGAAAA  
62001 ATGTAAGTAT TTCAAACCTCA GTTTTACTTT TTTTTTTTTT TAAACTGGGA  
62051 CCCCTGGTGC TTATTTTTTA GAACTCAAAT GGGTACCTAG CAACTGATCA  
62101 AATTCCCTAA CTGCAGGCTT GGTGAACCAG CGTTTCATCC TCACATTGTA  
62151 AAGCTGGCTC AAAGAAGACA TCTGTGCTTT GTTTCTGACA CGTTTTGTAT  
62201 TTATTTATAA ACAAACTCTC TTCTTCTTTG TCCCCACCC TGACTCCTCA  
62251 GTGGCCGTTT CCGCAGCAGC ACCGGTGTGC CAGCCCAAGA GCGCCACTAA  
62301 CGGGCAACCC CCGGCTCCGG CTCCGACTCC AACTCCGCGC CTGTCCATTT  
62351 CCTCCCGAGC CACAGTGGTA GCCAGGATGG AAGGCACCTC CCAAGGGGGC  
62401 TTGCAGACCG TCATGAAGTG GAAGACGGTG GTTGCCATCT TTGTGGTTGT  
62451 GGTGGTCTAC CTTGTCACTG GCGGTCTTGT CTTCCGGGCA TTGGAGCAGC  
62501 CCTTTGAGAG CAGCCAGAAG AATACCATCG CCTTGAGAAA GGCGGAATTC  
62551 CTGCGGGATC ATGCTGTGTT GAGCCCCCAG GAGCTGGAGA CGTTGATCCA  
62601 GGTGAGCAGG GAGTGAGTCC ATCTTAGGCC AGCTGGTGGG GTGGATGGCA  
62651 GTGTTGTTT TATCTTTCTG GGTCTCTAGT CTTGCCTTCA GTTGAGAGGC  
62701 TCTTGGTGGT CAGGGAAGTT CTCTCCAGGG AGGTGACATG TGAGCTGAGA  
62751 CCTCCAAGAA GCGATAGTGA GGCATGTGAC AGTGTGGGGG AAGGAGGGTC  
62801 CATGTTCTGC ATCTGGTTT GGATGAGTGG TCAGAGGCGG CAGCAGGCCA  
62851 ATGGACTTTG GATTTTCAAG TTCAAGTCCA CCTATGTGTG CTGATTAACT  
62901 CCTTGATTCT GAACTCTGTG GAATGCTGGG ATAGAACCCG AAGAAGGAAA  
62951 GAATTTTAAA TATGCAGATT TAGAATAAGC AGGGATATAT TAACCTGTCC

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63001 AAGGTCCATG AGGATGAGGT AGAGAAGAGG CCACCAGGTA TGTGGGTGAA  
63051 GAGGCTGTCA GTGGCTGAG ACAGCTGTTA TAGTGGATTT ATGGGGATGA  
63101 AATAATATGG ATCACAGTAG TAGTAATCAT CAGGTTTGCT GTTTTTGAAT  
63151 ACTTACTGTG TATCAGGCAC TGTACTAAGG CCTTTACATA CCCTGGATAT  
63201 TAAGGAAAAA AGATTCTTAG GAAAAATGGAA GCAGAGAACT TGAAGTGCAG  
63251 CCTAAAGAAG CAAGGCAACA CTTCTGGGCG ACAGATGTGG ACTTGGCAGG  
63301 GGTGGACTGT GGCGGTAAGG AGCTATAGGA AAGCCAGAGA GTCATCTGTG  
63351 GGGCTGCGGT GCGAGGGAAG GGATCAGGAG GGTGTGAAG TCTGGGAAGC  
63401 CAGAGAGAAA AGCAGTTCCC ACGAGGAAGA AAGGGAAATG GTGGAGAGCC  
63451 CTGTTGGAGG GCTTACCTTT GGACGTGAAG GAGGAAGGCT GCCTCTGAGG  
63501 CTGAAGTTC ACTTCTATC CCAGACACCC TCCTGAACTA CAAAGAGTGG  
63551 GTTTTGGTGG AAGGCGGTGA CATTATGGA GGTGAGGGAG AGTCTCATCT  
63601 TTCTGGGGGC TCTAAAGTTT GGAAGGTGGA GGGATGAAA AGACAGCTTT  
63651 TACAATTCCT TCTGGCTCTG GAAGATGCAC ATTAATTTCT AATGGCTGCA  
63701 ACAATCCAAG ATAGGTAGG ATTTACCAGT CTGCGTGT TTCTTATTTA  
63751 TTTATTTCTT ACCATACCAA TAGAGTAGGG GAATTCGAT GCTGCTTATG  
63801 ATCTGGCACC TTCATAGCAA TCATATTCTT GTCAGTTAGT TTTAATAATG  
63851 ACTTGACTCT TAAATAAATA GAAATACAAA TTCTTCCCTT CCTGGGAGTA  
63901 AATATGATTT CATAGCTATG CCCTATAATT CTTCTCAAAA AAATAAAATG  
63951 TTAATAATCC AAGGGCAGCA TTTCATATAA GTGTTTCATA GGAAGTCAGT  
64001 TCTCCAAATG GCTTTGTCTT TTTTTTTTTT CTTTTTCTT TTTGAGACAG  
64051 GGTCTCATTC TGTCACCTAG GCTGGAGTGC AGTGGTGTGA TCATGGCTCA  
64101 TTGCAGGTTT AACTTCCTGA TCGAGGTATC AGCTGATCCT TCTGCCTCAG  
64151 TCTCCTGAGT AGCTGGGACT ACAGGCATGT GCCACCATGC CTGGCTACTT  
64201 TTTGCAATTT TTTGTAGAGA CAGGTTTTCA CCATGTTGCC CAGGCTGGTC  
64251 TTGAATTCCT AGGCTCAAGC AATCAACCCG CCTTGGCCTC CTAAAGTGCT  
64301 GGGATTACAG GTGTGAGTCA CCACGCCCAT CCCTTTTCTT CTTTCATGGG  
64351 AAAATGCTAC CACATTGTG GTGATGAGAT TTTTGTACTA ATCAGTGCCA  
64401 GATTTAAAGC CTAGCATGCT ATAGAGAATG GAATAAACAA TTCTGGAGTA  
64451 GTTTTAAAGT GGAGTATAAT TACATTTATA CACATTGTTG TGATATGAGG  
64501 TAGGATCCTT TTTAATTAGT TGTAAGACAC GTCATAATAA CCTGATAGGC  
64551 GTTCTGAAGT GAATCTAGTA TTGTGTTTGA ATTTTCTTTC ATTAGGCAGT  
64601 AAGATCTTGA AGAAAAGGAA TGCACGTGTG TACCTTTTCC TCCACATGTG  
64651 ACCTATGCTT TGCTTTGCCT CTAATTATG CCCATTAGAT AAATGTTTTT  
64701 AGAGCAAGAT ATCAAAGCAA ATTGTAGAAC ACTGGTGTATG TCACAAGCTA  
64751 TCTGAGCTTA TCCATGCATT TGTTGATTAA TTCGGCATT TCCGATTGCC  
64801 CATTCTTTAA CCCTCATCTT TATGAGAGAG CTCAGAGACC TGAATGAAGG  
64851 ACAGGGTCAG AGAGCGTGA GGTCTTATT CTGATGCTGC CATTAGACT  
64901 GGTGTCCTGT TTTGACCTCA AAGATTTCTC TGTGAAATGA GATATGTGTG  
64951 TGTATGTGTG CGTTTGTGTG AATGTGTTG CACATACACA CGTGTGTGCA  
65001 TTTAAGATAA TTTTATAACA ATTTAAAAAG CTGCTCTTTA TTAGGCATCT  
65051 GTTATGAGCT GGGCATCATA TACCCATTAT CTCATTTAAT CTTATCAACA  
65101 ACACCTAAG TTACATACAC GATTCCCAT TACAGGGGA GGAAACATCA  
65151 GTTTCCTTAA AGAGTGAGT AACTTTCCAA CCACCAAAGT GGTAGAGCTG  
65201 GTAGTCAGCG CAAGGTTGGA CTGACTGTAC ACTCTCTCAT CCAAATAGTC  
65251 TACAGGCCCT TTAAGTAGAT CTTGGTTTAT AATAAGCTCC AGTCTCTTTT  
65301 AAACCTGTGC TTTATGTTGA ATGCTGTATT AGTCCATTCT CACTATAAAG  
65351 AACTATCTGA GACTAAGCAA TTTATAAAGA AAAGAGGTTT AATTGATTCA  
65401 CAGTTCCGCA GGCTGTGCAG GAAGCATGGC TTGGGAGGCT TCAGGAAACT  
65451 TACAATCATG GCAGAAGACG AAGGGGAGGC AGGCATGTCC TATATGGCTG  
65501 GAGCAGGAGG AAGAGAGAGC AAAGGGAGGG ATGCTACACA CTTTTAAACA  
65551 ACCATATCTT GGCCTGGCGC GGTGGCTTAC ACCTGTAATC CCAGCACTTT  
65601 GGGAGGCCAA GGTGGGTGGA TGACCTGAGA TCAGGAGTTC GAGACCAACC  
65651 TGGCCAAACAT GGTGAAACCC CATCTCTACC TAAAATACAA AAATTAGCCA  
65701 GGCGTGGTGG TGTGCACCTG TGGTCCCAGC TACTAGGGAG GCTGAGGCAG  
65751 AAGAATTGCT TGAACCTGGG AGGCAGAGGT TGCAGTGAGC CGAGATCATG  
65801 CCACCTGACT CCAGCTAGG CATCAGAGCA TGACTCTCTC AAAACAAAAA  
65851 CAAAAACAAA AAGCCAAACA AACAGATTTC ATGAGAACTC ACTCACTATC  
65901 ACAAGAACAG CAAGAGGGAA ATCTGCCCCC ACCATACCCC TTCTCCTACA  
65951 CTGGGGATTA CAATTCAACA TGAGATTG GAGGGACAT AAATCCAAAC  
66001 CATATCAGAC ACTTTCAGCA ATTTTAGCAG TCAAAAAGCA TTAGATGGCC  
66051 AGGTGTGGTG GTTCATGCTG GTAATCCCAG CAGCTTGGGG GGCCAAGGCG  
66101 GATGGATTGC TTGAGCCCAG CAGTTCGAGA CCAGTCTGGA CAACATGGCA

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66151 AAACCCCTTT GTACAAAAAG TTACAAAAAT TAGATGGGTG TGGTGGCACA  
66201 CGCCTGAAGT CCCAGCTACT TGGGAGGCTG AGGTGGGAGG ATCACCTGAG  
66251 CCCGGGAAGT CAAGGCTGCA GTGAGCCATG ATTGTGCCAC AGTACTCCAG  
66301 CCTGGGAAAC AGAGTGAGAC CTTGTCTCAG TAAGTAAATC ATTAGAGTTC  
66351 CTGGCTGCCT AACAGGAAGC ATTTCTGTTT CTTCTCCCTA TGCACATTGA  
66401 GCATCAGTCC TGGACCTGGG ATGCTTTTAG ATCTCCATCT ACTATGACTT  
66451 ACAGATTTCAT CTTGTGTGTT ATCTACAGTC TTTCTCACAA TATAAGTTAA  
66501 GCAGGTTTAA CTGCTGAATC TGTGTCAAAT CATTGCACCA AATCATTACA  
66551 TTTTGCCCTT CAGTTCACCT ATACCTTCAC AAGGATGAAA GTGTCCACTC  
66601 TTACAGACCA GGGAGCTTTC TCACACTTTA TGCCCTGAG CAGCACTGTA  
66651 TGTAGCGATC ACAAGAAACA CAGTATTTAA AAATAGTCTG TTTTCACATC  
66701 TGGAAGGGTT TTCAGTGTGC TGTGTTTTAA GTTGGAAGA TAGTACTATT  
66751 GTATCTCACC CAAGTCTGAA AGGAGTGACT GGAGAGTAGA AAGTAGATGG  
66801 AAAGTATTTA TTTTCATCATG TCTCTTGGCT GGATTGAGTG AACCCCTCAT  
66851 AAAGCCAAGC TGGAATGTGT GCTTCATATT ATTAATAACC AAAATAGAGT  
66901 ATCCAGAGAA GCATGATACC CTCAAAATGC CTGGATAGCC TAGAAGAGCC  
66951 TTAGCTCTTA CAGCATCGT GGGGAGGGAT TTTCCAACAA GTAAGACCAC  
67001 TTCATGGGTT ACTGTGGGAC TCCAGAGGAG AGTAATGGGC CACTATCCCT  
67051 AAAGGTGAAG AAAGATGGGT TGCTGTTATG AAGGGGACAT TCTCATCCAT  
67101 TCATTTAGTC ATTCATTCAT CTATCCATCC ATCCACTTGT TCTCAGAAAT  
67151 GCTGCTGAAC TCCTGCATGT ATCAGGTAAC ATGCCAGGTG TTGGGGAGAG  
67201 AAAGAAGAAG ACACGGCCGG GTTCGGTGGC TCACGCCTGT AATCCCACCA  
67251 CTGTGGGAGG CCGATCAAG CGGATCACGA TGTCAGGAGT TTGAGACCAG  
67301 CCTGACCAAC ATGGTGAAAC CCTGTCTCTA CTAAAAATAC AAAAATTAGC  
67351 TGGGCGTGGT GGCAGGTGCC TGTAATCCCA GCCACTCAGG AGGCTGAGGC  
67401 AGGAGAGTTG CTTGAACCTG GGAGGCGGAG GTTACAGTGA GCTGAGATGG  
67451 TGCCATTGCA CTCCAGCTG GGCAAGAGAA TGAGACTCCG TCTCGAAAAA  
67501 AAAAAAAAAA AAGACTCACC ATAAGCAAGT TACTCACCTC TTGTTTCTTC  
67551 ATCAATAGAA TGTGGCCTCA GGGTGTGAG AGGATTTAAAT GCAGTAATTC  
67601 ATGAGAAAAG CTTTGAACCTG TGCTTGGCAG ACGGTAAATG CTCACAAAAG  
67651 GATTATTATT GCTGCTTCTA TTGCTGTCTAC TGTTCTTTAT ATTATTGAGG  
67701 GAGCTCAGAT TTTCAAGCAG TGGTCTTAA TGGGATGGGG TGGGGTCACC  
67751 GGGGAGGGGA TGGTTGCCTC TAGGGGGCAT TTGGCAATGT CCGGAGACAT  
67801 TTTTGGTTGT TACAGCTGGG GAGGTGCTAT AGACATCTAG TGGGTAGAGG  
67851 CCAGGGTTGC TGCTAGACAT CCTACAATGC ACAGCATAGA CCCCCCTCC  
67901 CACAAAGAAT TATCCAGTTC AACATGCTCA TAGGTTGAGA AGCACTGGAG  
67951 GAAGAGGCAT GTAAGCCAAT AATTACAATC TTTTGGAATA GAGCTATCTG  
68001 AAAGACGTCC AAAAAATGGA GCCCTAGTGA GGCAAATAGA GCTCAGAGAA  
68051 TATTTTGTGG TTATTTATCT CTTTCACTCC CCACAGCTGT TCTGTGAGGA  
68101 TAATCTTTGG TGCCACATA CAGACGAGGA AATGAGGCAG CAGGAGCTGA  
68151 AATGATGGCT TAAGTTACCC TGGTTAGAAA TGGAGGATCC AGGGTTTACT  
68201 GCCAGGCAGT CTGACCACAT ATCCCAGGCT CTGAACCACC ATGCACTGGA  
68251 ACAGAAACCA GATATCTGGG AGGGATTATC TGGGTAGGCT ATGGTTGGAG  
68301 GGTATCCCAA TGGCTGGCAT GTGGCCCATG GGAAATGCT AACAAGTTTG  
68351 TGGTGACAAG AATGTTATAC TAATCAGTTC CAGATTTGAG GCATTGAAAG  
68401 TGATCAGAAAT GGCTTGAACCT GAGAAGTATG AGAGTACGTG GAAATGAGAC  
68451 TGGGAAGGGG GTCGTGGGAG CTGGGCTGAG GAGGTGCTTA GAGGACCTTT  
68501 ATGTTGTGGA ATGTCGAGTC ACTGAAAGCT TTAAGCGAGG CTTGGAAGAT  
68551 GGAAATTGGC TGCTGAAAAA ACCTTTTAGC AATGAGGAAG TTGGGTTGGA  
68601 GGAAGGAGAA ACGGGAAGAA GGAAGACCAG TTAGAATGTT GCAACATCAC  
68651 AGGTGAGGGA TGCTGAGAGA TAGAGAAAAG GCTATATTTA AGAAAGTTGA  
68701 CAGAGAAAAC TTGAAAATTA CTCAAACCTG ACTCAGCAAA GATTTCTGCT  
68751 ATGTGCTGCA TATCCCTGCA TGGCCTGTAG CCCCCAAGAC TCGGGGGTTA  
68801 ATCTCCCCAC GTTAAATCCT ATACCACTTA ATGAGCTGAG TGAATTGGGC  
68851 AAATATCATG TTGCCCCGGC CTCCTGCTC TTCTGTGAAA TGGAGATTGC  
68901 GATCAGCGTG TCTACCTGTT AGACACTATG GTGGTCTGAG GATTAAACAA  
68951 AAGAAGCTCA GTAACCTTGA GCTCTTGTTA TTGCTGCTGC TTATTTGTTA  
69001 GGGAAGGAAG AAAAAAGAA ACCAGAAAAC TCCTAACTGA TGCGCATCGT  
69051 GGAGTTCTGC TGAGGGAAAA GAGAAGAAGG TGTCTGAAAT GACTCTTGGG  
69101 CTTCAAACCTC TGGATTTTCT CATAGAAAAA TTTTATTTCT ACTGTTCAAG  
69151 TGCAGAGTGC CCATCACAGA AGTCGCTCCC AGAGTGCTAG GCTGGGCTGC  
69201 TCACACCATG ATGCTCTGTC TTTGTGGCTT GAGCTCAGGG AATCAGACA  
69251 GCAAGTTGCT ATTCATTGA GAGGGTTTAC TGTGGGCATC TAGAATGTCA

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69301 TCTTTATCCT TCGTCTTACT GGAGACTGTC AGTCTCACAT TTATTAAGTA  
69351 GACACTAGGG CCGGCTCCAC TGATCTCTCT CCCCCTGCT TCTCTGGTTT  
69401 GAGGCACAGT TTCAGAGAAC CTGAGGGACC CGGTGGGCTC AGGCGGCCTC  
69451 AAAGCAGCAG GTCACCTGAC CAGTGGAGTG ACCACAGATT CCAAGGTGTG  
69501 ACCGAGTGAA AGGGCTTATA TCCCCAATGC CTGACTGCAG TTAACCCTA  
69551 ATGAGGTATG TGGATCTTCT AGAGGAAGGG CCAGGCCCTT TTAATAAGGA  
69601 CCCTTCTGAA CAAAGAGACA AGATGCTAAT CCGAATTCCA CTAGGACCAA  
69651 GTTTGATGTC CTAGGGCCAG CCGCTTAACC CGAGCTGGGG CTCAGCAGTT  
69701 AAGCACATAG AGGACACAAA AGATGCATCC GTCTCTAGAA TCTTACCCCT  
69751 GAGATGTGAG GGAGTGTGCA GACGATTGTA AATGGGTAAC TTCCTGCAGA  
69801 GCTGGTGTA TAATAAAATA TAGCTACCAC TTACTGATTG TTTACTTTCC  
69851 TCTAGACTCT GTTCTAAGTG CTTGAATCCT CTAGCTCATT TAACTCTTGC  
69901 AAGAAGCCTA CAAAGTAGGT ACTTTTTTTT ATTCCTTTT TTTAAACAG  
69951 GGTCTTGCTC TCTTACCAC ACTGGAGTGC AGTGGTGCAA TCATGGTTCA  
70001 CTGTAGCCTG GAACTCCTAG GCTCAAGCAA TCCTCCTGCC TCAGCCTCCT  
70051 CAGAACGTTT CTGGGGGTAG GTTGGTCCAA TCCCCTCAGA GTGAGCAGGT  
70101 TATCTCACTC CTTGGAAGGC TGGCTTCTCC CCTGCCTCTC TTCGGTGCTT  
70151 GCCTCCAGCA AGTTACTGAA GTCCTCAGAG GCCTCTCCAC CGTGAAATGG  
70201 AACTGTCTG TCTGTGGGAC TACAGGTGGA TACCACCAGA CCCAGCTAAT  
70251 TTTTAATTTT TTTTTTTTTT TTGGTAGAGA CAGGGTCTCA CTGTGTTGCT  
70301 CGTGCTGGTC TGAAACTCCT GGCCTCAAGC AATCCTCCCA CCTCAGCCTC  
70351 CCAAAGTGCT GATATTACAG GTTTGAGGCA CCATGCCCAG TCTGAAGTAG  
70401 GTTCAATCAT CATCTCATTT TATGGATGAG GAAATAAATC CCAAGAAGTT  
70451 AAATAAATTTG TCCAAGTCCA GACAGCCAAT AAGTGATTAA ACTTGGATTT  
70501 GAGCCCTGGG AAGCCAGACT CCAGAGCCCA CACAACGAA CCCTTGCGCC  
70551 ATACTGCTTA CTTGCATCAA TGGTGAGTAT CCCCTCACTA ATATGTAGAC  
70601 CTCTTCATAA AGCTTTTACT CCAAGGAAAA GGCTGGAGGG AGAAGGAAAC  
70651 ATGATTCAAG AAACCTGGCT GTCTGGCATG GTGCTATAGC ACTCCACGTG  
70701 GGGAATATTG TGTTTTTCAA GAAAGGTGT GTTAGAAGGG GAATGATCAT  
70751 GGAGATAGAC TCAGATAGAC TTGGTCCCTC AACACCACTA AACCTAAGGC  
70801 CCCTCCTCAT ATTAAGGGA TCACAGTCCCT CATTAGGATG ATTGTGGGGA  
70851 GTGAGTGAAC CTAGCAGAGT GCCTGGCATG TCACTGGCAT CAGGAAATGC  
70901 TATTTCTTTC TCCCACCCGT CTTTCTTCTC TCAAGCGAAC TGAGTAGACA  
70951 AAGATAATTA TACCTGGAGT ACTTGCAATTT CTTTGGCAGT AGAATAAAGT  
71001 AAATTTAAATG TATTTTTGAA GTTGAGGTTT CCATGAACTT GATTTGGCGG  
71051 TCACTGTGTC CCAAGAAAGC CTTTATCTTT GACGTCCTCA CATGCCGCAA  
71101 TTGCTTATCT CCCTGTTCCC AGTGCAATTG TCTTAGAAGC TTCTATACTG  
71151 ACTAGTCTTG GAGAAAGCCA TAAACATTC CTCTTTTGTG ATCCTCAAAG  
71201 AATAAAATCG TGAGGAGCCT TCGCTGACTG ACGGGGAAGT GTAGAATGAA  
71251 TGCTTCGGTT TGCAGGGATG ATCATTGGCA GCAGTCTTTT TTCAGGTTAT  
71301 GAATTCGAT GTTTCCCAGA TGTTTGAAGA TTTTGAGTGT CTTCAGGGGA  
71351 GCTCGAGTGG TCCCATTGGCT GCCATTTCTT CTGGTCATAG CCTCGCTGAA  
71401 GGGAATAGCA TTTACGGGA GTGGGTTAG GGTGATGATG GGCACCCATC  
71451 GGGAAGGACA TGGGATTTTT CATTCTAAGT GCCTTGCCAT AAAGCAAACG  
71501 ACAGGGGTCT ATTCTCTCT CTCTGGAGAA TGTTTCTGGG GGCAGGTTGG  
71551 TCTAATCCCC TCAGAGTGAG CAGGTTATCT CACTCCCTGG TAGGCTGCCT  
71601 TCTTCTTGG CTCACCTCAG TCCTTGCTC CAGCAAGAGG GGTCTCTCCA  
71651 ATGCAAAATG GTCACGTCT GTTCATGATA GTTTTTCTGT CTGAAGAAAG  
71701 TCCCAGGGCC TTCATCTGCA TGGCTGGGGC TAGGTCTGGA ACTGCCTGGA  
71751 GCATGAGCCT TTTGGGGGT CTCTTCCAC CTGCTTTGTC TCTCTCTCTC  
71801 TCTCCCCCTC ACCCTGACTG GTCCAGTGAC TCTTTATGTT GGTGAACAGA  
71851 AACTTTACCA TTGGTTTTCA CTTTATGACG TCTATGGGCT TCCCCTCTCT  
71901 GCCCCAAGA TGGCGTCTCA CTCTGTTGCC CAGACTGGAG TGCAATGGTG  
71951 AGATCTTAGC TCACTGCAAC CTCTGCCTCC TGGATTCAAG TGATTCTCCT  
72001 GCCTCAGCCT CCAAGTAGC AGGGATTACA GGCTACTTCA CCACCCAGC  
72051 TAATTTTTAGT ATTTTTAGTA GAGACAGGT GTTGCCAGGT TGGCCAGACT  
72101 GGTCTCAAAC TCCTGACCTC AGGTGATCTG CCCACCTCAG CCTCCCGAAG  
72151 TTTTGGGATT ACAGGTGTGA GCCACTGTGC CGGCTAAGGA TTTTTTTTTT  
72201 AATCCTTTCC AAATAGAGTT TCAGATACTT TGCTCAGTAC TGTGTTTGAT  
72251 GAGTATTATT TGGCAAGATT TATTATTTT TCATTAAAAA ATTAATAAATG  
72301 ACCTATAATA ATTGTATGTA TTTATGAGGT ACCTCGTGAT GTTTCATAC  
72351 CTACAAATGTA TGATGATCAG ATCCGGGAAA TTAGCATATT CATCATCTCA  
72401 AACATTTATC ATTTCTTTGT GTTGGGAACG TTCAATATCC TCCTTTTAGC

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72451 TATTTGAAAC TATATACTAG ATTATTGTTA ACTGTAGTCC ATCCTGCAGT  
72501 GGTATAGAAC ACTAGAATTT ATTCCCTGTTA TCTTGCTGTA ATTATGTCCC  
72551 GTTTAACAAA TCCTTCCCTA TCCTCTGCTC CCCTGACTCT TTCCAGTCAG  
72601 CATTATTAT TAGGCACTGA TTCTGTGCTG GCTGGGTGCT AGAGAGTTTA  
72651 CATATATTAC TTAGCTTCAT TTGCCTCTCT CCATTGCACC AAGAGGCGGC  
72701 CACTGTTGCT GCCCCATTTT ACAGAGGGTA AAGTTCTTGC ATCTAGCTAG  
72751 TGACCAAAGC AGGACTTGAG TCTAGCTAGA TCTCTCTGAC TCCAGAGGCC  
72801 ACGCTCTCTT AATCGTACTC TCCTTGGCTT GACACGGTGG GCTTAGAGAG  
72851 TACATAATTG GATCAAGACA AATTCCTCCT GACGAAGGGA AAACCCACTC  
72901 AAACAACATG ATGACGAGC TCCTTTGTGA CAGTTAGTGC TTGCCTTCTA  
72951 ACGCAGAGCT CTCTCTCCTG TCCTCTTCTT GTATTTGTAA CCTTCTGAC  
73001 ATACAGAGAG CCTGCATGAC AAGGCTGGGG TGCCAGATTG TTGGCCTCTG  
73051 GCTTACTGAC TCATTTTATT GGCTGTGCGC ATTGGGCCTG ACTCTACCAT  
73101 GTTTTAGTGG AGAAAGATTT AGTCTAAGAT GTGGGCAGCG GCATGTGAGG  
73151 AGTGGGTATT GTGCTGTGGT CCTGGGTATG AACCTTTGAT GTTGTCATGG  
73201 CAACCAAAGC TGCTATTCTG CAGATGAGAG GACTAGATAT TATGAAGTGT  
73251 CAAACTGTTC TCTCCATAAC CAAGGAGATG TTGGTAATCT CCTTGGTAAT  
73301 TTGCATGACC CATAAACATT TCCCAAGGCT GTGGCTCTGC CCTTCTGCCA  
73351 AGACCCGAGT CACTCACTTG CTCACTCACT TACTCATTG CTCACTCACT  
73401 TATTCACTCT TTCATTCAAC AAACCTGTTG ATTGCCTACT GTGCTAGATG  
73451 CTGGGATGTA ATGGTGAATA AAAGACAGAC ATGGTCCCTG CCTTCTTGGA  
73501 GCTTATAACT AGGATGACCA AATGTCCCAG GTTTTGTGGT TCTGGAGTAA  
73551 TTGTTAATAG TGCCCCTTTC TCTCTCAGAA GTGTCTTGGG GCTGGGCGTG  
73601 GTGGCTCATG TCTATAATCT CAGCACTTTG GGAGGCTGAG GCAGGCGGAT  
73651 CACTTGAGCT CAGGAGTTTG AGACCAGCCT GGGCAACATG GCAAAACCCC  
73701 ATCTATATTA AAAAAAAGT GTCTTGGTTT GAAATATAAA ATATATAGTG  
73751 ACCCTACTTA TAGACAGTGG GAGAGCCAAA CCTTATGCAT GTTATTACAC  
73801 AAATAATTGT AACTAAAAGC CAGATGAAAG TTGCAAAGGA GAGGGAGCTA  
73851 GAGCTATGGG ACACCCAAAT AGGAGAACTG ATTTAGTAGG ACAAAGATTC  
73901 CAGGCAGAGA GGGCTGAGTC AAGGCCCTGG ATGGGAGGAA GCAACATGCC  
73951 ATGGCTGAGG ACTTGAGAGA AGTGAGCAAA TGTGGCCAAA GGGCATTAG  
74001 CAAAGGGAAC TTAGAAAGCA ATTTGGCTGG AGACAGGCAG GAGCCAAACC  
74051 ACGCAGGTGC TGATTCTGAA TTTTATCTTA AGAGCACTGT GAAGCTTACA  
74101 GTTATGTTTT CAGTAGCAGA GTGATATAAT CTGGTCAATC AGTACATTGC  
74151 CATTTTGGTT CTTCGTATAA ACCCAAAGGG TTTTAAGTTA TTTGTTTATT  
74201 AATTCAATAA TAAACATTT ATGGAGTGGC AACTGTGGCA CTCTGCTAAG  
74251 TGTTTTGCTC TGGAGTTCTG AACTCAATTG TCCTCAGTGG TGCCAAAAC  
74301 CAACTCTTGG GGGAAGCCTT TATGGGCCCT TTATGTTGGG TCGTGTCTCTG  
74351 CTTGGCACCA TTTGCCCCC ATTTGCTAGA CTCTCTTGA TGACCTTTAC  
74401 TTTTCTCTGT CCTCTTTCCA TGACTGTGAG CTCTTTGAAG TTGAATCTAT  
74451 GTCTTTTATC AATATATCCC TTCTGCCTGG CACAGTGGCT GGCCAATAGA  
74501 AAATGCTAAA GGCTTGAGGA ATGAAGGAAT GGTGCTTTTT GTGTCTGACC  
74551 TTTTTTTT TTTTTTTT TGAGACAGAG TCTTGCTCTG TCTCCCAGGC  
74601 TGGAGTGCCT TGGCATGATC TCAGCTCACT GCAACCTCCA CCTCCTGGGT  
74651 TCAAGCGATT CTTCTGCCTC GGCCTCCCTA GTAGCTGGGA CTACAGGTGT  
74701 GCACCACCAC GCCCAGCTAA TTTTGTGATT TTTAGTAGAG ACGGGGTTC  
74751 ATCATATTGG CCAGGCTGCT CTTGAACCTT TGACCTTGTG ATCTGCCAC  
74801 CTCGGCCTCC CAAAGTGCTG GGATTACAGG CATGAGCCAC TGTGCCAGC  
74851 CTTTGTATCT GTTTGAAGAC CAAGAGCCCT TCATTTAGAA CTTTCACAGA  
74901 AGGAAAGCAA AAAATTCTTT TGTTTCTGTT TTACAAGTCT TTTCTTTTGT  
74951 GTCTGGTTGT CAATAGTACT TCTCTGGATC CGCCTCCTGT ATTCAAGTGA  
75001 TTTTCTGTC TCAGCCTCCT GAGAAGCTGG GACTACAGGG GTGTGCCACC  
75051 ACACCCAGCT AAGACAAAAA CTCACCTTGT TGTCTTCTTT ATGCATGAGC  
75101 AGATTCCCTT GGTATCTATA GCCGTCGAAG CTTTACGTAT TTCCCTATTT  
75151 AGGGACATAA GAATTTTATG GAAAGCAGCG TGTTGGAAAG CACGGCACCT  
75201 GAGATGTTCA TGGAATCCTT TGTTGTGACT TCAGAGTGCA GATCTAGAGC  
75251 AGCCCTCTGT TTGTCTGCCC TGGGCCATCC CCTATTTCAG GCAGTCTTTA  
75301 GTCCAGGAAG TTTAGGTAGC AGCTCAGGCA GCAGGTGAGC TCTGGAGAGT  
75351 GCAGGTTCGG GTTCTTTGAG CCCAGGGGCA CAACTCTGAG TTGAAGTGAC  
75401 TCCTCCTGTC TGTTGCTTTG AATTTAGAAG AGCTGCCCTT TCACCAGCAA  
75451 GGCAGTCACG CAAAAGATGC TTCAATGTGT GCAAGATCAG GCCTGCAGCC  
75501 CCCAGCCTGT GTCTACAGGC CTCCGAGTCA TTATTATTAC GGTTTCTATC  
75551 CCTGGGGTTA TTGATTTCAT CACTGTTTAG TGAAGGAGAT CTAAAGCTTT

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75601 TAAGCCAGAA ATTAAAGAGG TAATGGAAAT TGGCATGCCA CTGGAAAATG  
75651 AATTTCAGAA TGAGAAATCA ATGTTCTAAA AAAACTCCCA TAAAAATAAA  
75701 ACCAAAACCC AGAAGTGAAT GCTCCTGTGA CTGCATTTT TTCCAAATGT  
75751 GCATGGGTTT GTTCTCCTTT AGAGTGTGGC TGTATACATT ATGGAATAAT  
75801 GAGATTTTGA TGGTGTCTCG TTCCTACAAT TGCTCTTATT ACTTATCACA  
75851 ATACAATGTA TTCATTTATA TAACTAATAT TTACTTAGTA CCTATAATGA  
75901 AGCAGGTGCT ATGTTTGGCT CTAGCGATTA AAAACAATA AAAAAATGCAA  
75951 GATGCCTCCA CCCTGTCTC AGGGAGCTTG AGGTTCAGTA TTAATTATAT  
76001 CGCTAGCCAA TTCTGGCATG GTGCTTACTG TGGACAGGAA CTGCTCTAAA  
76051 TGCTTACGCT GTAGTAACTC ATTTAAATTT TACATTGATC CTATGAAGTG  
76101 GGGTAAGCAA CAGAGGAACA GAGAAGTTAA ATAACCTGCC CAAGCTGAAG  
76151 TGAGAGGTGG AACTGTGATC CGGCCAAGGC AGTCCGGCTC TAGAATCCAT  
76201 GGTTTTTAGC CATGATGCTC TACTCTAGTG GATAGTTACA GCCCAGTAGC  
76251 TATTGGTTAC TAGATTGGTT CTAGAAGACA AGGAAGCACT CAGGTCCTTA  
76301 GTCACAGAGC AGGAGTCTCT GACTCAACCT ATGGGACCCC CAAGAGGACC  
76351 TTCATTACAC TGTGAGTCAA CTGCAGAGAG TCGTGATTAC CTCCTGGTTG  
76401 TCCTTTAGAG TGGCAGGCTT TTGTGTCTTA ACATAAGGTG TTGAAGCTGG  
76451 GTCACCTTT TCGATCTAAA ACCAATGTCC ATGGGTTATC ATTCAGGTCT  
76501 GCAATTAAGA GTAGCTTGTC ACTTTATATT GGGAACATTT ATTTTTCCTT  
76551 CTTTCTCTAT GGAAATGGGC AGAAGAGATG AAAAGCCTGC TGGTGCAGCT  
76601 TAACTTCTCT CAGTAAGTGA GTGTTTAAAC TTTTGTTTT TTA AAAATGG  
76651 AGATGAGACA TACAAATTAT GACTTCTCTA TGTTGTCTT TTTTCTAGTT  
76701 GGAAGAAGGT GACATGACAG ATGAGCTTTA GAAAAATGTT TAGAAGGTGA  
76751 ACAGAGAACT ATTCGTGAA GATAGGAGGC TAGAGTTAAA AGAGAGGACT  
76801 TTAAACCACT CTCAGCTCTG ACACCTCCTA ACTACTATAA CCTCACAGGA  
76851 TTTTGTGAGG ACTAAATAGG ATAATAAGGC GGAGTCTGCC ACATTGCAAG  
76901 TGCTGGCAGC TATGATTAAT TTTAGGAGTA TTCTAGAACT TTCCCTGAAG  
76951 TTTCTAGCAT TGTCTGCACT TCCTTGTTTC TCCCCTTATC AAACATGCT  
77001 CAGGGAGATT TGGTGACTCA TTCTTAAGGA GGCACAGAAA ATGATTTTTT  
77051 TTTTTTTTGG CACAGAACTT TGTTCTGTAA AGGGCAGTCT TGCTCTGTGG  
77101 AGGCTGGAGT AAAGTAGCAC GATCATGGCT TACTGCAGCC TCTGCTTCCT  
77151 GGGCTCCAAC GATCCTCCCA CCTGAACCTC CCGAGTGGCT AGGACTACAG  
77201 GCATGCACCA CCATACCTGT GTAATTTTTG TATTTTTTGT AGAGATGGGA  
77251 TTTTGCCATG TTGCCCAGGC TGGCCTTGAA CTCCTGCGCT CAAGCAATCC  
77301 TCCTGTCTCA GCCTCCCAAA GTATGGGGAT TATTGGCATG AACTACCATG  
77351 CCCAGCTGGA AATGAAATCT TAATTTGTGA TTAATATTGA TCACTCAAAA  
77401 GCAACAAAGA CCCCAGGTT AAATAGCTAC AATAAAAGCA AGATAGCAGA  
77451 AGCCTCTCTT TTTTCATGATG TTATTAATCA TCTAAATATT AAATTTCAGG  
77501 CTCTGTTCAA TGCAATGGCA ATGGAAGGAA TAGTAACCTT CCATTTAGTG  
77551 CACAGTGTAA TGAATCAGAA TTCTTGTAGC TGCTTTTGTA GTCCAGTACA  
77601 GTTTTTTAAA AATAGAAATT GGATAGACCC ATTTTTTAATG GGAATGATCT  
77651 CAAGTGCAGA GAGAGCAAGG CATATATCAG ACACTCTCCT CAGGACCAGG  
77701 GCAATTTTTC AACATCAGTT GGCAAAATTG TTATTCTGTC GTAGAGTGT  
77751 AAGTCCAAAC TGAGATGAAA GAGTGACAGC TTGTTAGTCT GAAAGTTTAT  
77801 TGATCATATC AAAGTATACA CATCTATCCC TGATTCCTTA GTGGACTTGA  
77851 TACTTTCCTC GTGGTTTTAA ATTTGTCTTA TTTCATCCTT CCATGTAGTC  
77901 AAAGAGAGAC AGAGGAAATG CATTTTCCAT CATAAGGCAC AATTTGGAAG  
77951 CTACAAGAGT GCCCCCAAAT ATGGCCTGGT CTCATAAGAT AATATTTAGA  
78001 TAGATTAGTC GTTAGTGAAT ACCCAAGGGG CTAATGAATT GAGTCTCAGA  
78051 AATCCCCATT GTAAGGGATT AACTTGTAGT AGCAAGGAAA GCTAGCGTGT  
78101 CTAAGACCAT ACGCCATGAG CAAGCATGCT AGCCCATCCT GGGTTTCTCT  
78151 CTCCTCTTCT CCAAACAGAT TCTCCACTTG CCCTGTCTT TCTGCCAGTG  
78201 GCCTTCACCT TAGATTTATA ACTAGGCTGT AAAGTTCTAA TGAAAACCTG  
78251 CTGCCTGGCT CCCTGAGGAC CTGAGGAAAG GCTAATATTT GCACATAACT  
78301 GGGTACTTAG GGCAGTAGGA AAATACACGT CATTGTAATA TCCACCACAG  
78351 CACTGAAGGT GCCTCTTTCT TTACCTTTT ATGGTCTGGT CTGCTTTTTA  
78401 TGAGGGACTC TGAGGTGGTG TGGCAGTTAG GAAGGCCACT TGATTGGGGC  
78451 GTGTCCACTC AGGTGAGCCC AGGCTTGACT GCCATATTGG CTGTGTCTGG  
78501 GTGGGAGGTA AAGGCACACG TGGCTCAGCC TGCATTCTCT TCCCTTCGTC  
78551 CTATTGCAGG TAGCTGGGTG TCCCAGGCTG GGTGTGAGCC AGCCTGCCCT  
78601 TCCCAGATGT GGGAAGCTGT GCGTCTGAGA TAGAGAAAAA AGAACTCAAG  
78651 GTAGAGAGAA GCGCCTTTGC AGAGTTCAGG ATGGTGAAC TCTGTGTGAC  
78701 AATTCTAAGA GCATTGTTTG CTAGCTTTGC TGCGCACCAG ATGTGTACTG

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78751 TACACACAGC ACTTTACCAT TCTCAGTGTC ATGAGTCCCT TGGGGGCAGC  
78801 AGTGTGCCCC ACTGTACTAG GTCCTCACCA GGGCTGAGTT AATCTGTACT  
78851 CTAGGAAGTG CTCCGAAAGG GTTCCTGTTA CTAATACTCC TGAATAAGAA  
78901 ATGACAAGGC ACAGTGCCCTG AAGTCTTATG TTCATTTTTA GACAACTCTG  
78951 ACAACAACCT TGTATGGAAG GTATTAGTCC TCATTTTATA GATGAGGAAA  
79001 TCAAGGTTCA GAGAAGCTGA ACAGCTTGCA AGGCTGAATG GTTACCGCTT  
79051 TATCCAAGAA CTTTCCCTGT TGCAAGAGTA ATGTATGAGG TGCTCCCACT  
79101 GTCTTCCTCT GCACTGAATC CAAGACATCT CTGAATCAGC CACAAAAGTG  
79151 CCTCACTGGG TGTGGCCCCA GAAATCCTCT CTGAGACCCT CCCATGGTTG  
79201 TTTGAAATAT TGTGAACTCA CCTTGCCCTT GGAAGATTCA CTTGTGTGGC  
79251 TGTGGAATAT TTATATGTGA AATACTTCTG AAGCAGGTGA AAGAAAAAGT  
79301 AATTGTGGCA AGCAAATTAA ATATTGTCTT TCCACTTCAA ACCCGAGGCT  
79351 CTTCGGCCAT AAATGTGTGA GGAGGTGGAG AGATGTGCTT GCCCTGCTGC  
79401 TGGGGTTTTG AATCATTAGG GGCATTTTTG AGTAGTAATG AATGTGGTCT  
79451 GCCAGTTGCC TTTCTCACAG AGTTTGTGGC TTTCTCCCA ACTGCTAATG  
79501 GCTGGAATAG GCTCCCTTTT TTTTTTTTTT TTTTTTTTTT TGAGACGGAG  
79551 TCTCGCTCTG TCCCCCAGGC TGGAGTGAGG TGGCGCGATC TGGGCTCACC  
79601 GCAAGCTCAG CCTCCCTGGT TCATGCCATT CTCCTGCCTC AGCCTCCCGA  
79651 GTAGCTGGGA CTACAGGCGC CCGCCACCAT CCTGGCTAAC ACGGTGAAAC  
79701 CCCGTCTCTA CTAAAAATAG GCTCACTTTT AATACATTTT AGAAACCACT  
79751 TTCCACATTC ATGCCCTCAT CCTGCCTCAA TCCCTGGCTA AATCTCCAAT  
79801 TCATAATCCC TTTGCTGACT GTGCCGTTCA GGGAGTAAGA ACGTGGTGGA  
79851 CGCAGCCACC ATTGTACCTT CAGATGAAGT CCTTTCTCGA GAGACAAACA  
79901 GTCTGTTAGT AAAATGACCA TACATCCTGG GTTGCACCTG TCCTGTGGTC  
79951 CCAGCATAGC TGTTAACAGA GCTACCTTTT TATTTGCAAG TTCCCTGCTT  
80001 TGGACAATAG ATCAACTGGT CATCCAGCTA TTAGCGTCCA TGCATAAAGC  
80051 ACGAATCTGT TGTATTCTTC AGCCAATCTG AGACAACCAA GAGATTACTG  
80101 CTGCACCTTT GTTTGTCTTT CTTTTTGGTG GCACATAAGG AAACAGAGAA  
80151 ACAGATGATC TCACCGAGTG CACAGATCAT AGGAGAAAAG CCACAGACAG  
80201 TTAGTGGTCC CACTGTGGTC ATCATTCATC CCAGTGACAG ACTAACGCTC  
80251 ATGATGGTAT CGCACGCTGT CTGGAGCAGT GATTTCATGTA GCTGGCGTTG  
80301 CCTGATGGGA GGAACTGGT GGGGAAAACG TGGTGGGGGG TCCTGTGAGG  
80351 GGTCCAGTTA CCTCCTCCTC CTCTCTTTCT AAGCGCATCA GCTACAGACC  
80401 CGCCTCACTT TGTGAGAGGT TGCAGTTTCT CTCTTCTGCC TGTCAGGTAG  
80451 TCCTAATGCA TGGTGTGGGG GAGGGAGGAC AAGGGAGAAA GAGGGGCACA  
80501 GAATCTTTTA GATCTGCCCT TCTTTCAAGT CAGCTCTCCA CCTCTTTTAA  
80551 AAAGAAACAA ATCATTATTA TTTTGTGTGT TTTGTTGAGT TGCTTTTGTG  
80601 TTTGTCTAAT TTTAGAAAGA AGTAAAATGT TTTCTCTCTA CACCTCTGGG  
80651 AAGATAATAT ATCTAAATTT ATTAGTTTAG TTTGTTTATT TATTTATTGT  
80701 TAACTTAAAA CATTCACTCC CGTGCCATTT ACTGGGTAGC TGAGTGGGTG  
80751 CTGGAAATGC CAGCTTAGAG GCTAAAAAGG AAATTCAAGG AGGAATGGAA  
80801 TTAATAATGA AAGTAATGCC CTCTTATCTA CAGTATCCCC TCGTATCTAA  
80851 TTATCTGTCT ACCTCTATTG AATTATCTGC CTGTGTGAAT TTTTTGATCC  
80901 TTGTAAGATC TCTCTGAAGT TGATAATGGT TGAAGTTGTA AGTGAACAAA  
80951 TGATGCTCAC TGAGTCTGAA ATTATTAAAT AACATTGGTT GAACCTCTAC  
81001 CCTGTAACAT CTTTGTAGCT AAAGTGTTCG GAGCTCAGTT GTGCCATTTC  
81051 ATCATCTGTG TGCTCATACA TTCTAATGGG CTGCCCTCCA TTCCTTCTG  
81101 CAGCCTGAAT GCAGGTAATT TTTTCTTTTT TTTTTTGAGA CAGAGTCTCA  
81151 CTCTGTTGCC CAGGCTGGAG TGCAGTAGCG CGATCTCGGC TCACTGCAAG  
81201 CTCCACCTCC CAGGTTACAG CCATTCTCCT GCCTCAGCCT CCCGAGTAGC  
81251 TGGGACTACA GCGCCCGCCA CCACGCCTGG CTAATATTTT TGTATTTTAA  
81301 GTAGAGATGG GGTTCACCA TGTTAGGCAG GATGGCCTCA AACTCTGAC  
81351 CTTGTGATCC ACCTGCCTTG GCCTCCCAAA GTGCTGGGAT TACAGGCATG  
81401 AGCCACCGTG CCCGGCTGAG AAAAATCTTA AAAGCAAATG CATTTAATTT  
81451 TAAAATGTTT TACTTGAGCT CAAACAATTA AGATCATTG AAAAATACTC  
81501 GAAAATTAAAT AAAAATTAGA ACTGTAAACT CAATTAGAAT TATTATTATT  
81551 GAGTTAAAAA TGATGTTGCC AATTCAAATG GTAACGTCAG TTATAACCCG  
81601 AGTTTGCTGA TTCATTGAA TTCTGGTTGT TTGCCAGAGT TTTTCAGAGT  
81651 CATAAGATCC AGATAGAAAA TCAAACCTCA TTCTCAGCAT TGGGGCTTTC  
81701 TAAAGCCTTG TCAGAAATTT GGTGACTCGT GGGAGAGCTT ATTTTCTCC  
81751 TTTTCATTGA GTCTTGCTCT CAAGGAGTTA GTTCAGATCA TCAGTGGCCC  
81801 TACTTTGCCC ATAACAAGCC TTATGTATAA TTTCCACAAA ACTGCTTCCC  
81851 CAGGGCATTG GGGTGCATTG GCCATTTTAC TGAAGATTG GCAGGGAGAG

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81901 AGGAATTGAC GTCACAGATA GAACCCAGCT GAAATTGGAT ACTAGATGGA  
81951 GTTGCTCTTC AAAGACTTGG GCATTGCCGC TACGGAGCCT GAATTTCCCA  
82001 CCTGTACGTT GACACCCCTT TTTGTGCGTT TATTTCTTCT TGTCCCTCCTT  
82051 TTTCAGGGCT TTTCCCTTTT CTCTGATCCT TCCCTCTTAG GGTATAAAAA  
82101 TCAACCTTTT CCTACTTTAA TTAATTTATT CTTTAATTTT ATTTTAACAC  
82151 AGAGCGACTC ATCTCTAATC AGCTTCAACA GCCAAGTGAA GTTTGGTGTC  
82201 TCCATTTGCA TGTTCAAGGA AGTAGTCTAA TTAGAAATGA TCTCTCGTGA  
82251 GGTCTCTTCT GCCTAAATTC TGGGACAATG GCTATCCTCC TTCCTCATCT  
82301 GTCTGGAGGT GAAGATGGGA GTAGGGGAGG CAACATGCAT TCTAGGTACC  
82351 AAAGGTAGAG AAAAGGCAAA ACCATCCGCT TTGGGCCAGA CAGGGTTGAA  
82401 TCCTGGCCTC TTCACTTCCT GGCTGGGTGA CCTAGGACAA GTTAATTAAG  
82451 TTTCCTGAGC CTGTTTCCCC ATCTCTAAGG TGGGGGATAA TACTACTTTC  
82501 TTGCAAGTTA TGGAAAGGAT AGAATGGAAT CACACACAAG TTGTAGAAAG  
82551 GATAAAACAG AATGACGCTT CTAGTGCACC TGGCGAAAGG CAGGCACTTA  
82601 ACAACTGTTA GTTCCCTTTT CTTTCAACT GATAAACACT TTCCTTGAGG  
82651 GTTACATAGG TAAACATTAA ATATTTATGA ATTGCATAAT TCAAGAAAAA  
82701 TGAAACTTGA AAAGGATTCT TCAGATTTT TGATGAAACA AATCATCGTC  
82751 CCCATTGTCT TTTGTGCAAA TCTGTGTTTT TGTTTGCAGT GCTGGGTTTG  
82801 CTTATGACAT TTGTGTGCAA TTCTCAGCAC CGTGAGACTT GAGTGAGCCT  
82851 AACCTCTCTT CACAGCTTGA TAGGAGTTGT AAATATTAGG TACTGATGGT  
82901 ATGATTGAG GCAACCTAAG TGACTGAAGC CTAGAGCCCT CCCTGCGGTA  
82951 TTATTTCCAA GTGGGCTCAT CAGAGCTGAA TTGATAATGA AGATATAAAC  
83001 ACTGGTGAAG GCTTTGTGGC TTGGTCTGAT GGTACTCATA CGGCACAGTG  
83051 AAAATGGAGA TGCTACCGGT GGAAAGGACT CACCATCTGT CTGCCCTCTA  
83101 GAGCAGAGCG GAACATACCT CTGATGATTA TGTGACCACT GTCAATTAGG  
83151 CTGATTTATG CAAAGACAGT CTGTACACAT CCCATGCAGC CAGATTTTAA  
83201 ATTCTAGGGT GCCAGGTTT GCTAGAAACA GTGGCCGGCT GCGGTCTTGC  
83251 ATAATATTCC ATGTTCTCTT AGAGGCAGAA AAGAATAGAC TCACGACTTG  
83301 ACAGAAAGTG CTTTTTCCCC CTGTATCATC CAGTCAATTG TCTATGAGTC  
83351 TGCCAAATCT AGCTCGCAGC ATCTTTTGT ACAACCCTG AGCTGAAAAT  
83401 GGTTTTTGCA TATTTAAAG ATTATTTAAA AAAAGAAAAA TATCCAACAG  
83451 AGACCCATAT GTGGCCACC AGGGCTAAAA TATTTACTAT CTGACCCTTT  
83501 ATGGAAAAAG TTGTTGATCC CTGGTTCAGA GTGTTTGAAA TAACTCAGAT  
83551 GAAAGAAGGC AAAATGTAAT GATGATTGAC TTTTCCAGTT GTAATCTGAT  
83601 TTGTGACAAC CACTGTATGC CTGTTTAAAC AAAGCTTAAT GGGCATTACT  
83651 TAGGATAAAT GTAATTACGT TTCAATATTT GTGTCTTGCT CTCCCTACAT  
83701 AGGGTTATTC CAGGTTTGCC CAAGGAACAG AGAGTCTGTT TGTGTTCTA  
83751 GAAGTAGCTC CTGTGTCTGT CACCTCCTCT CCAAGGCTTC CACCTGTCGC  
83801 TTTTTTATCC CAGTTCACCC GTGTGAACAG CATGTGTTTC GGCTGCCATG  
83851 ACAGCACGTC CTACCTTTT CCCTGGCTTG AAAGAAGATG GCAGGGGCCA  
83901 GCTCAGGAAG AACTGCTACG GAGT'TTTTTC ACCTTCTCCT GCTCGTGATG  
83951 AGGCTAGGGA GGGATTTTGA GCGTATCTTT AATTGTTGCC GAAGTATGAA  
84001 CTCGGGGGAG GGGGCAACTG TGAAGCAGTG ATGCATAGAC TAAGTCTCCT  
84051 GGAAGAAGCA GGGCTTGAAT TAGACCCAGA AGGATGGGCA CCGTTTGTGG  
84101 GAGGGCACAG GTACATAAGT ACAGGGAACA TGTCATGGAG TGTCTGCCCC  
84151 AGAGTGGGGA ATTTATAGCA GTGTGAGATG AAAATGGGTC ATCATTGTGG  
84201 CCAGTTTGTG GGAAATTTTA AGGTGTATGG AATTCCAATT CAGTTATCAT  
84251 CAAGGAGTCA TTGTAGCTTA TTTTAAAAA GAGCGATGTG TGTGTGTGTG  
84301 GTGTGGGGGT GGGGAGAGT GGAATGACAA TCATGAAATT GGCTACTGTT  
84351 TGGTAAACCC TAAGTGGGAG CCAGACATTT GGCTAAGGGT GTTACTTGA  
84401 CCATCTCATT TAATCCTCAC AACAACCCTG TGGGGAAGGT ATTATCTCTA  
84451 GTTTGCAAAT GAGGAACTA GGCTCAGAGA GGTTCAAACA ACTTGCCCAA  
84501 GGTTCTGAAG TTAATAACGG CCACAGCCAG GATGGCTCTT AACTCCTGCC  
84551 CTGTGGAAAC AAGCTCAACG TAAAACATTC TTACAAGACA GAAAAGAGTG  
84601 AAAAAGCAAC CAAAATCCTG CCTTGCGGAA ATGCCCCTT TGGGTGAACA  
84651 TTCTTCTAGA CATTTTGTGT GTGTGTATAT GCACAGAAAT TTGTAACATT  
84701 TTGCATAATC TGGGCCACCC CATGCCCTGA AGCTTTCTAT AAATGTCACC  
84751 ATATTCTATA TCCTAGCGTT TCCCCCTAT TTAACACTAA TTTTCTGATT  
84801 TTCACAACTG GGTGCATAGT ATTTTGCTTT GGGATGCTAC CATCATCCAC  
84851 TTAACCAGTT CTCTCTAGAT CACTGCAGGT TCTTGAGTAG GGGAATAATG  
84901 TATTGGAACC TTTTTTTTTT TGAAGAAAAA AAAAATAAAC AACTTTTAAA  
84951 CTGAGTCTTA TGCTTTTTC CTTTCTTTGC AGCATGCTCT TGATGCTGAC  
85001 AATGCGGGAG TCAGTCCAAT AGGAACTCT TCCAACAACA GCAGCCACTG

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85051 GGACCTCGGC AGTGCCTTTT TCTTTGCTGG AACTGTCATT ACGACCATAG  
85101 GTACCCGTTT GTTTGCTAAT ATCTCTTCCT CTGCAGGTCA TCTTGAGTAA  
85151 GGGCGCTTAG TCAGTGTTTT GTCCTCATAG CATACACTAT AGTTTGAGGT  
85201 TCAGAGGAGG CTTACGAAAC ACTGTCGTTT AAATTAATGC AGTCATTGTG  
85251 GTGGCTTTCA ACAAAGCCA AAGCATAATG AAGTATCTCT TTTTCCAGAA  
85301 TGAAAGGCTA GCAAACCTAA TGAAAAGGTT AGAATGAAA ATATGAGTTG  
85351 GTCGGTTGAA CTCGGGTAC TCATTTGAGC TCAACTCCA TTTTAAAAAT  
85401 TGTACTTCTT ATTAAAGTTA TATAGTAAGG AACCAAAATA TTCTACAAAA  
85451 TTTTTTATAA AAAACAGTAA CATTCTGACC GTCTCACCTT TTCTTACCTT  
85501 CCCAGAGACT GTTGCTTTCA TCTGTTTGA TTGTTGATTT TAACACTCAT  
85551 CCCCATGTCT TTAAATATCA TGCTTGCTGCT ACTTCTGGAA TTTTCAGTTT  
85601 TGGGGATTTT TTTTGACTTT CCATTGTGGA AGATGAGGAG TTAGTTCCTT  
85651 CTTCTGCCT GCCTCATCAC AGAAGGGCTC TTTTCTGTCT CTCCTGTCTT  
85701 CCCAATATTT AATTAGATAG AAGTGAAACA TCTGCATGAT TTTGACTAGA  
85751 TAAATGCTTT CTGCAGCTGA TCATAGAGTG AACAGTGATG ACCTCTTCC  
85801 TGTATCAGTC TTTGTCTTAT TTTTGTATG TGTGCTTTT TTTTCTGACA  
85851 CTTGGTGAGT TTTGTATTTT TGTCTTAGGG GTTAACCTTA TTTATTATT  
85901 TATTTTATTT TATTTTATTT TATTTTATTT TATTTTATTT TTTGAGATGG  
85951 AGTTTCACTC TTATCACCCA GGCTGGAGTG CAGTGGTGCA ATCTCGGCTC  
86001 ACTGCAACCT CCGCCTCACG GGTTCAAGTG ATTCTCTTGC CTCATTCTCC  
86051 TGAGTAGCTG GGATTACAGG CGCCCACCAC CATGCCTAGC TAATTTTGT  
86101 ATTTTATAGTA GAGATGGGGT TTCACCACAT TGGCCAGGCT GGTCTCAAAC  
86151 TCCTGACCTC AGGTGATCTG CCCGCCTCAG CCTCCCAAAG TGTTGGGATT  
86201 ACCGGCGTGA GCCACCGCAC CTGGCCTAGG GGTTAACTTT ATAAGTATAA  
86251 TGGCATATAA TAATTTTAGT GTTCTATTCG TTAACCAGCA TGTATTCGAT  
86301 CCCTATAACG GGTGATGATA TCTCTTTTCT CTCTTTTCC AACACAAAGT  
86351 TTTGGTGGAC ATCATCTTTT AAATGATTAA ATTTGCTTAT GTTCTCTTA  
86401 TATGATTTGC CAGCTTTAAA TGATAACTCT TGGCACTCAG CTATTACATA  
86451 TAAGGCAGTC AGTGAACCTA GCATCTCAAT TTCCTTTCCC TCTTCCACTA  
86501 TCCACTGCTT TTCCATGGTG CATTCTATAT AAGTTGTATC TCACCTTATT  
86551 GTGCTTTGCT TTATTGTGCT TTGAAGATGT TGAGTTTTT TTTTTTAAAC  
86601 TAATTTAAGG TGTATGGCAA TCCCGCATTG AACAAGTCTA TTGGTGCCAT  
86651 TTTTCCAACG TCGTGTGCTC CACTCTGTGT CTCTGCCACA TTTTGGTAAT  
86701 TTTACAAATA GTTTCAACCT TTTTCATTTT TGATTATATC TGTTAAGGAG  
86751 ATCTGTGGTC AGTGATCTTT GATGTCATGA TTGTCATTGT TTTGGGGTGC  
86801 CACAAACCAT GCCCTTTGAA GATGGTGAAC CTAATCAATA AATGCCGTGT  
86851 GTTCTGACTG TTCACCGCAG TGGCCATTCA GGCATCCCAG ATCCCTGAGG  
86901 CACAATGGTA TTGAAATTTG GCCAATTAAT AACCCTGCAG TGGCTTCTCA  
86951 GTGTTCAAGT GAAAGGAAGA GTCAGTTGCA TGTCTCTCAT TTTAAATGTA  
87001 AATCTAGAAA TAATTAAGAT TGGTGAGGAA GGCATTTTGA ACTCTGAAAC  
87051 AGGCCAACAG CTAAGTCTCT TCTGCCAAAC AGTTAGCAAA GTTGTGAGTG  
87101 CAAAGGAAAT TTTGTGTTTT ATTTTTTTTG AGACAGGATC TCTCTGTGTC  
87151 ACCACGCGAG GAGTGCAGTG GTGTGATCAT GGTTCACTGC AGCCTTGATT  
87201 CCTGGGCTCA AGGGATCCTC CCACCTCAGC CCCCTAAGTA GCTCAGACTA  
87251 CTAGTGTGCA TCACCATTC TGGCTAATTT TTAAACATT TTTTCTAGA  
87301 GATGGGGTTT CACTATGTTA CCCAGGCTGG TCTTGAACCT CTGGGCCCAA  
87351 GTGATCCACC CACCTTGCC TCCCAAAGTG CTGGAATTAC AGGCATGAGC  
87401 CACTGTTCTT GGCCAGGAAA AATTCTTGAA AGAAATTTAA AGTGATACTC  
87451 CAGTGAGTGA GCACATGAAT GATAAGAAAG TGAACCAGCC TTATTGCTGA  
87501 TATGGAGAAA ATTGTAGTGG TCTGGATAGA AGATCAAACC AGCCACAACA  
87551 TTCCCTTAAG CCAAATCTA ATTCAGAGCA AGCGGGCTCT TTTCAGTTCT  
87601 ATAAAGGCTA AGAGAGGTAA GGAGGCTTCA GAAGAAAAGT TTGAAGCTAG  
87651 CAGAGGTTGG TTTATGACAT TTAAGGTAAG AAGACCTTTT GATAACATAA  
87701 AAGTGCAGGT TAAAGTGCCA AGTGCTAGTG GAGAAGCTAC AGCAAATTAT  
87751 CCAGAAGGTC TAGCTAAGAA AGTGGCTACA CTAAACAACA GATTTTCATT  
87801 ATAGACAAA CAGCCTTATA TTACAAGGTG CCGTCTAGGA CTTCCATAGT  
87851 TACAGAAAGAG AAGTCAATGC CTGGCTTCAA AGCTTCAAAT GATAGGCTGA  
87901 CTCTTTTGTG AGGGGCTATG CAGCTGGTGA CTTTATGTTG AAGCCAGTGC  
87951 TCGTTTACCA TCCAGAAAAT CCTAAGGCCC TTAAGGATTC TGCTTGCCTT  
88001 TCTATTAAAT GGGAACCTCA AAAGCCTGGA TGACAGCACA TCTGTTTACA  
88051 GCATGGTTTA CTGAAGAGTT TAACCTCACT GTTGAGATCT ACTACTCAGA  
88101 AAAAAGATT CTTTCAAAAT AGTTCTGTTC ACTGACAAAT CACCTAGTCA  
88151 CCCGAGAGCT CTGATGGAAG GGTGCAAGGA GATAAATGTT GTTTTCATGC

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88201 TTGCTAATAC TACATCCATT CTTTCAGCCCA TGGATGGAGT AATTTTGACT  
88251 TTGAACCTCTT ATTATTTAAG AAATACATTT CATAAGGCTG TAGCTGCCAT  
88301 ACATAATGAT TCCTCTGATG AGTCTGAGCA AAGTGATTTG AACATCTTCT  
88351 GGAAAGGAGT CATCATTTGTA GATGCCATTA AGAACATTTG TGATGAATTG  
88401 GAAGAGGTCA AAATACCAAC ATTAACAAGA GTTTGGAAGA AGTTGATTCC  
88451 AAGGCTCATG GATGACTTTG AGAGGTTCAA GACTTCACTA GAGGATGCCA  
88501 CTGCTGATGT GTTGGAAATTA GAAGTAGAGT GTGAAGATGT GACTGAAATG  
88551 CTGCATCTCA TGATAAAACT TGAATGAATT AGGAGCTTCT TCTTATGGAT  
88601 GAACAAAGAA AGTGATTCTT TGAGATGGAA TCTGCTCCTG CCTGGTAAAG  
88651 ATGCTGTGAA CATTGTTGAA ATGACAACAA AGAATTGAGA ATATTATATC  
88701 AACTTAGTTG ATAAAGCAGT GGCAGGTTT GAGAAGATTG ATTCCAATTT  
88751 GAAAAAGTT CTACTGTAGG TAAAATGCTA TCTAACAGCA TTGCATGTTA  
88801 CAGAGAAATT GTGAAAGGAA GAGTCAATGG ATGTGGCCAA CTTCTTTGTT  
88851 GTCTTATTTT AAGAAATTGT CACAGCCACC CCAGCCTTCA ACAGTCACCG  
88901 CCCTGATCAG TCAGTAGTCA TCAACATCAA AGGAAGACCC TCCGCCAGCG  
88951 AAAGCATTAT GACTTGTGTA AAATCAGAT TATTATTAGA ATTTTGGTA  
89001 ATAAAGTATT TTCAAGTTAA GGAGTATATA TACATTTTAT AGACCTAATG  
89051 CTATTGTACA CTCAATAGAC TGTAGTAGAG TGTAACATA ACTTTTATAT  
89101 GCACTGGGAA AAAAAAGA AAATGTGTGA CTCATTTTAT TGTGGTGGTC  
89151 TGAAGTCTAA CTCACAATGT CTCTGACGTA TGCCTGTATA ACCTCAGGGT  
89201 ATGTAATTTA GATTTTAAAT TGTTACCTG ATATTTGCAT TTGTTTTAGT  
89251 CGTAGCTCTA TAGTTAGATA TCATTAATGT TCATCTCTAG TCCTTTTGCT  
89301 GTGGTTTATC TCATGATCAC TTAAGTGGCT GAAAGTCATC TTCAAGTAGT  
89351 TGCCTTAAGA ATGGCTCAGG GGAGCAATAT TCTGTGAGAT CTTGCATTGT  
89401 TCACAGTTGT AGCTTAACAT TTGAAGGATA GTTGAACAA AATGAAATCC  
89451 ATTTTATTGA CTCACATTTT CTTTTTCTTT TTTTTTTGA GACTGGGTCT  
89501 TGCTCTGTTG TCCAGGCTGG AGTACAGTGG TATGAACATA GCTCACTGCA  
89551 GTCTCCAACT CCTGGGCCCA AGTGATCTTT TGGCTTCAGC CTCCTGAGTA  
89601 GCTGGGACTA CAGGCGCATA CCACCAGGGC TAGCTAATTT TTAATAATAT  
89651 TTGTAGAAGC CAGGCTTGC TGTTGTGCCC AGACTGGTCT CAGACTCCTG  
89701 GCCTCAAAGG ATCCTCTTAC CTTGGCCTCC CAGAGTGCTA GGATTACATG  
89751 TGTGAGCCAC CACGCCTGGC TTTAATTTT CTTTTTAACT GGTCTCACAG  
89801 GTGTTGCTCT TCTGTTTCCC AGTTTTTATG CAGCTGTTGG GGGAAACCTG  
89851 ATGCCAGCCT TTTTTTCCCC ACTTTTATAG GTGACTTTAT CTTTTTGTTC  
89901 AGTGACTTAA AATATTATTT CTCTTTCATC TGATAACATT ACTAGGTTTT  
89951 GACTCTTTTA TTGCATTTAA GTTTTCTTGA TTGACATCTT TAAACATTTT  
90001 CTTTGCTGTG TGGTTTGGT TTTGTTCTTT GGGAGATTAC AGCTATACAT  
90051 ATATTGTAAC TTCTTTGCTC ATCTTCTATG TCTCTCATTT CTCTTCTACT  
90101 TTTTAACTCT TAAAATCTAG TTTTCATTT GTTAATTTTA TTCTCCCTAT  
90151 TCCTTTAGTT TGTATGTTT CCACAATGCC TGTGCTGCCA TGAGCTCCTT  
90201 CCAATTTTAT TTTTGTTTT TGTGATCAAT AGGGAATTTT TTCCTTTTCC  
90251 TGTTTCTTCT CTGAATTTCA TAGCTCACAT TTCATCTTCA CTTGTTGTTC  
90301 CATTTTTCAC CTGATTTCTT GAATTTCTAC TTTTGGCTT CTCTGTGAAG  
90351 ATTCTTAGAG ATGATTATTT CATACTTGGT CACAATTTT GTCTGATTTT  
90401 GGAAACATTT TTCTGGTGAG CCTCTTTCCA TCCATTGGTA AGTTTTGCTA  
90451 CTCTTTTTCAC ATTTTTTTTC TTATGGAAGT TTTATATTTA TGCTGGGTCA  
90501 ACTTCTTTT AAAATACCTG GCCCCAGGCA AACTGGATAT TCCTGGACCA  
90551 GCTTCTGCCC AAATGATTTT ATGGAGTTGG GGAGAGGAGA GCAGGGTGAG  
90601 TCAGGGTACC ACCTTCCAGA CAGCACATCC TAACTCTCTT CATTTCTGTG  
90651 ACAGAGTGTT TCTGCAAATA GGGTCCTTCT GTATTATTTC TGTCTACCT  
90701 CCCTGTTTTC TGAACCAGAT CAAGTTCAGG GTGGCTTCTG CTGCTCTCCC  
90751 TCTTTATCCT ATGTTTCATG CTTGGTAAAA ACAGGGACAT CTCTTTTGAA  
90801 GTTCAGAGTG AGACCCTCCC CTTTATACTT GGATATTTTC GGATACTTTC  
90851 TGAAATTTAC CACTTTAGGG CCCTGTCTAT ATTTTCTGAG CTTCTTCTTT  
90901 TTATTTTTTG TTCATATGGC TTCTGTCCAA TCTCCGCTTC TTTTGGTAGT  
90951 TCTTACACAT ATGCTGGAAT CTCTGGATTA TATCCTTCTT CCAGCTCTGC  
91001 TGAAAATGAG TTTGAGGATT TTCTGCCAC ATACAATTGT GAAGTAGCAC  
91051 TGCAACAAAA ATCTTCATTC AGAAGCAGGA GAGACACCCA GCAGTCACTG  
91101 GTCCACAGCA ATGAGGGACA GGCATTGAGA GGCTCCCCG CCCTCCTGGT  
91151 GGGGAAATTT CTTTCATTC AACTTGTTTA TACTCTCTAG GAGGAACTCC  
91201 CTGCCTTATT GCTCTCTGAA GCCCAGCTAT GCCTTTTGAG AGGTTCTTTC  
91251 CTCTGAGGCA CAGTTTTGAC AATCAACTTC CTATAGGCGC AAATTTTACA  
91301 GGCTAACGAT TGGTTTAGCG GCACAGGTTT TTGCTTTTGT TTTAAGATCT

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91351 AGCCTTCAGG ACCTATGTTG TTTCTAGGTG AAATCCAGAA AGTCATATGC  
91401 AACAAGAACA TTTTGGATGA AGGAAAATTG CCATTGTTAT TTAGAAACAC  
91451 TCTTAATCTA ATTATATGAC ATGCTAGGTT TACACTTGCA AATCTGCAAA  
91501 TATATTGGTG TTAGCTATTA AAAGTATTCA AGATGCCCAT GACACCAGTG  
91551 GGTCTGGGGC TTAGAAGCCT TTTCTGGCAC TCTAGGCCAG GTTAGGTCAG  
91601 CTTAATCCAC AGACTCACAG CGTCCAACAA AGGAAGCTGG GTGGCTGAC  
91651 ACCATTAGT ATACGGGCAA AAAGTGTTAG CAACCTGAAC AACACCAGAG  
91701 GCGGTTGCTG TAGTGGATCC AAGAAGACCA ATGTCAGGTT TCATTGTGTT  
91751 CAGCAGATTG TTAACCTGGG AAAAAGTGTC ACGCATTGTA GGAGGATCTA  
91801 TTGTACACCA ATTAAAATTG AGAAAGTCTG GGCCACTTCA AGAAGTACAT  
91851 TTTGGAAAAAT GCTCTCTGAT ACCCGGTATT GGATTCATGA GACATTAGTG  
91901 TGTATATTGA AGGAAACTCC TAATTTTCTT GTTTCATGAC ATGGCTAAAT  
91951 GAATGATCTG TCTGCTGCAT TGAAAAACAC TATGGCTACA TTGGAAGGTG  
92001 CATTAAATGGT ATTTATGTG TTAGCTTGTT AGGAATCCAG GAACTTGGTT  
92051 TATTGAACAA CTATGTTTAT TGATCCACAT AATATTATGT GACTGAGGAA  
92101 TGGTGGCTCC ATCTGCCTAA TGAAGAACGT TTGATATGCG ATGGTTTTTG  
92151 CCCTTTTTTTG TGTGTGTGCT TACACCGGAA TCTTTGAGTT TGAGCAAATG  
92201 GCTCTTAGCC CTTGGATTCT GTTGCCTGGA TTCCATTAC TTA CTCACCC  
92251 ATGTCCTCAT TGT CATATCC CCAGTGGTTC CCTTCCCCAT GCTTTGTCCC  
92301 CAGGCCTCAG GTGAACAATC ACCTTGTCTA GACTAAGAAA TCCAGTGCTT  
92351 GGCCACAATT ATTAGTTCAG AGATGGACAT ATGATCTGGA TTAGGGGCTT  
92401 TTGCCGGAGC TTTGGAGGAA ATGACCTCTC TTTCTTACTA AAGGTAAGTC  
92451 TGAAAAGAGA CAGGCCTAAG GCACTGCCAG TCATTTTTTT CCCCTTGGGT  
92501 TGTTCTGCCT AGAATTCATC AAACACTAAA GAAGCAGAGT GAAGAAAAGG  
92551 AGTGGTGAAT GGGGTCTTGT TTACATCATT TGAGCTCTGG ATGGTGCTAC  
92601 CCAGGAAGTG TTAAGAAATA AATGTTAAAC CCCCTTCTAT TTA CTGGGGT  
92651 CAATATATTT TCTTTCTGTG TTTAAGCGAG TGTGCGTTGA GCTTTCTATT  
92701 ACCTGCAAGT GAGAACATCC CAATACATGC TTTGGGTCAG AGCTCATGCA  
92751 GGGCCAGTGA ATATCCTCTG ACCTCCACAG CTAGTGACTG AGCCTGCTGG  
92801 CTGCTGCAGC TGCCATCTGT CATCATCTTT GAGCCACTGA CTCTTGATTT  
92851 AAAGTCTTAG GCAGAGCCAT CCTATTGTGT CATGTGCACA CATCCTGGCT  
92901 GCCTAGGAGC TGTTTCTCT GTGGTGGGAG GCAGGACACT GTGTCATACC  
92951 AATTATGCAC AGGAAGGGGG GCTTTCCCAA AAATCAGAAG GAAGGTGGAT  
93001 GCTGAACAGG AAACACTCTG AAAACAAATG TGCATCAAAA CCAAAAGTAA  
93051 AATGCAAAAGT CCACTTCAGT ATCATTGTAC AGTGTTAACA CTAGAGATAG  
93101 GGTCTTGTGT CTATTTAATT TAGAAAACAC AATTTTCTCT CTCACTCTTT  
93151 CTTTCTTTTA ATTGAAAAAT AATGTATTGT AAGTTGAGCA CCATTAGCT  
93201 GGCTAAATTT TAACCTCAGA GTGGAGGATC TTTATAGAGT CATACAGTTA  
93251 GAGAATTCCA AAGAAGCCCT TAATACAATG TAAGTAAGAA TAATGAGGTG  
93301 CAGAAAATAAT TGTTTTTCCA GTTACTTAGT GGTAATTCAT TTTGTTGCAT  
93351 GTGGTCGCAA GGTTTATAAG AAAACTCAGA GCCCAGCAAT TCTTCCAGTT  
93401 CTTCTTGAGC AATTTTCAC TAGTTAGGAG TCAGGAAAGA GGAACCGTGA  
93451 GAGCTGAGGA GCTGTGTATT TCATTAATTG TGAAATACAC AAATATTGGC  
93501 CTGTTTCTTT GCGATCATAA AATTTGCAAC GTAATATTGC AGACATTTTT  
93551 GCATATTACT AAAGTTCTTT GAAAAGTGTA TTCTTTGATG GTTTCTATTG  
93601 GATCCACTAT TCACACTATA ATCACATATT CCTGGGAAT TAAGCTGTTT  
93651 CTATTTTAGT AATAGTGTA CACCATGGTG TTAACGTTGT GAAGTGTTGT  
93701 CTTCATCTCT GGTGTGTGCC TTGGAAGGT TACCAAGGGT TTGCTCTGTC  
93751 AAAGGAAATG AAAGGCTTGC CAAATTTCTT TCCAGAAAGG CTCCTCATGAG  
93801 CAGCTTAAGG TTATTGACTT TTCAGACATA AAAAATGTGT TTATTAGGTA  
93851 GAATGTGTAT AGACACACTT TGTGAATAAT AGAATCTTTT CTGAAAAGCA  
93901 GCGCTACTCC TTAGTATCAG AGATCCCTTT TATCTGAGGA TATCAAAGCA  
93951 CTTCTTTTTG AAGAAGGTTT TTCTTGTGCT GAGATATATG GAAAGATTTA  
94001 CAAGTGTATA GCAAACGGAA TACCTTCAGG CACTTCTCCA GACCAGTAGC  
94051 CACGCCAGAA GGAAGAGCAG ACTCTGCTCT GTCAATGACA GGGCTGCACT  
94101 GCACCTTAGT CCCTTTCTCA GTAACATAAT CAACGTGAGA AAGTCCCACC  
94151 TGCCTTTGAT TATTGGCTCA GCTGGTGGGT CCCCCGTAAC TAGCTTTTCT  
94201 AAGCTGGATG AATGATGCTC ACTTCTATGT GCAGATGCTT TTTACAAGC  
94251 TGTCATTTGT AGAAGGACAG CGAGCGATCA GGTTCTTACC AATATCTGTG  
94301 AAATGCGATT AGATTTTAGT CTGTGAGGCA TTTTCAGATT GAGCCACCTG  
94351 ACTCTGCCCA CATCAGAGAG AGAGCCTCTG GTCAGGACCA GGTGGTAGCC  
94401 AGTCACTGTG TCACTAGCCT GGCAGCCTCA TTTAAGGGTT GTCCCTATCA  
94451 AACTATCGAG GCACCTGTTG GTACTTACCC AGCACTGGAT TGGATGTTTA

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94501 TTTTTTATTT TTATTTTAT TTTTATTCAG AGAAGGGGTA TTGCTTTGTT  
94551 GCCTGGGCTG GAGTGCAGTG GTGTGATCAT AGCTTACTGT AACCTCAAAC  
94601 TCCTAGCTCA AATGGTCTCT GCGCCTCAG CAACCAAGTA GCTGGAAC TA  
94651 TAGTTTGTC CAACCATGCC GGGCTAATTA AAAAAATTTT TTTTGTGTAG  
94701 AGACAAGGGC TCACAATATT GTTCAGGCTG GTCTCAAATT CCTGGCCTCA  
94751 AGTGATCCTC CCACCTTGGC CTCCCAAAGT GCTGAGATTA TGAGTGTGAG  
94801 CCCCACCTGA TTTAGATGGG ATGTTTAACC TGTGCCTTTG AAAAGAGCAA  
94851 TCACCGTGGC TAACATTTAC TGAGTCTTA CTAGTTAACG TGCATTGTGC  
94901 TCCACATACA TTATCTCATT TAATCCTGCA TAACCACATG AGGTGGGTAC  
94951 TGTTATTAGC CTCATTTTAT CTATGAGAAG ACTGAGGCCC AGAGAAGTTA  
95001 AATAACTTGC CCGGTATTTC ATAGTTAGTA AGCAGTGGAG TCCAGCTAGA  
95051 TTCACCAGGA CCAGCTACAT AATTTGTGGC ACCCAGTACA AATTGAAGTG  
95101 GGGTCCCTTA GAGCATTAAA CCAAGCACAG GACCCATCTA AGCGTGGGCC  
95151 CTGTGGGACT GCACAGGGTG CACATCCATA AAGCAGCCCT GCCTGCGCAG  
95201 ACAGACTGGT GACCATAATA AGAAAGCACA CTCTCAACTA AACAAGTAGG  
95251 GCTGCACAAC ACACAGTTGG GCCAAGATTT GACTTTGGCA CGTAAACAGC  
95301 AAATGGAAGC CTTTGTGTGC ACTCCTCAGG CACAAGTCCT CTTTAAATGC  
95351 CAGCTTTCTC TTCCTGAAAA ACGGGGAAC CTTTTCTAGC CAGAGGTGAA  
95401 CAGATCTGAG CTCATCCTGG TGCTGTGCGT TCATTACAGC CTCCCCTTGG  
95451 CTGTTTGGCC TTGTGGAGTT GGTGTCTTC TGCTGAAAGT CACCACCTGA  
95501 TGCTGTGGGT GCTATGGGAG AACAGTGAAG TTTCTGGAGG GAAGATAGGA  
95551 ATCAACCGCC TGTTTTCTCC TGGGACTGAG TTTCTCTGGA GACATATTGC  
95601 TCAGAAACAA TTCCTTCCCA CAGTAAAGCA CAAGGCAAAAC GGGGTGCTTA  
95651 GTTTGCATCA TATTTACAG GTATTTAATC TTCACATGTA ACTCTTGCTT  
95701 TGCATGTAAC TCATTTAATC TTTAATAGCT ATGGGTAGGC ACTTTAATAG  
95751 CTTGTCTTT TGATGAAGAA AGTGAGGGAG AGAGATTAAG AATGTGCCTA  
95801 TGACCTGAGA GTTGGTAAAT AGAAGAATCA GAACAGAAAT CTGTGTAGTC  
95851 TCTAGTCTA GAGCCTACAG ACAACTGTCA CACCTTACTT CAAAGTCTA  
95901 CCCAAGCATT CTAGAAGGAT GAGCAGGGCA GTCAGAGAGG CGGGGTGTAA  
95951 CTAGATCCCC AAATCCAGAA ATGTGGTCTT CCCATTGCCT CAGAGCAAAG  
96001 CTCCAAAGTG TAAGTGCTGG AATTTTCCCA GAGTGACAGT GTTGAGGGTC  
96051 AAACAGTCTC TCCTTATAGT TCACCAAAGG CATGGAGCAC AAATACACTC  
96101 ACACACACGC CCATGCATGA GATACAGCAT CACTCAAGAA TGATGACTTT  
96151 CTGTCCACTG GGCAGTGTGT CACCAAAGAA AGATGGCTGT GAATATATTT  
96201 AAAGGCTTGT TTGAGTATTG CATCACTCAT GCTCTTACCC AAGAACTTAG  
96251 CTTTAAATAT ATTTTGTGT TCTAGTCAAC AAAACACTGA ACAAATAAGG  
96301 AACCAATTGT GATAATAATA ATAATAATAC TTTGCATTGG TACAGTACTT  
96351 TACAGTCCAT TGATTTTTC CCCCCTGCAT TTTCTTGAG TACCTCTGAC  
96401 ACTAGGATTT GCAGATGTTA AGTGGGTCTA AGGAGAACTA GGTAGTGTGA  
96451 GGTGGAATTT GATCCAGATC TTTTCATCTC TCACCTCTCC CTGATGCTCC  
96501 ATGGTAAGCC ACAGTGCCCT ACCCAGGAGG TGGGTGGGGG TGGTCACTC  
96551 TGAAAGCTGG AGGAAGGGGG TGTAGCACTT GTCAGGATTA ATGAGATGCC  
96601 TGTTCTATCA GTTCCAAGCC TCCACTTGTG TGCCATATGC TGCAATATAT  
96651 TTCTTTCTGA GACACTTGA CAACCTATAT TCCCCAAAGT TAGGCTATTG  
96701 TGAGACAGTC AAGCTGGGGT CTTCACTGTT TTCACAAGTT ACTTGAATGT  
96751 TTCCAAGAGT CACCATAAAC CTGCATAAAG TGAAACTGTA GAGGCTCATT  
96801 TATTTCTCTT TCAATAGGGC TAGCTTAATG TCAGCTCGAC CATTCTAGAG  
96851 GGGTATTCTT GGAAAAATGA TTTTGTCCAA GTTCCTGAAA GTACCTGAAA  
96901 AAAGTTCTGA GAGCTTTTTT GCATATTTAA ATCAAAATCC TGGTGAGTAA  
96951 AGGAAATACA AGATGAGGAA GCCTAGCCTG AACACTCATT TTAGAAATGG  
97001 AAGCTGTAAT TTAGATTATT ATAAGAGGTT TGAATGATTC AGAACAGAAG  
97051 ATTGCAAAAG AAAGTATCCA GGTGACTCAT TCCCGAAGGC AGAAGGCAAC  
97101 CGTGAGTTCT GCAGGCCTGT GGGTGGCTGA ATGATGGACT AACCATCAAC  
97151 GTTTTTTTAT CATGTTGCAT TCCCAACCTG TCAATAACCA TGGACCCAAT  
97201 AACTCACTCA TTGAATAGAT TCAGAAACAG GCCCCACATG ATTTACCCAG  
97251 ATTTGGGAGA ATGGTTAGAT TACTGTCTAG ATACTTTTTA ACATAAGATT  
97301 GTAATATCAA TTGGCACAAA AATGAATATT AATTAATTTA GACTTTTCATC  
97351 TCCATATAAA GTGTGCTAAT GCTATAGGAC TTTTCTTCC AGCAATACTT  
97401 TCTTTAGCCT CATCCATATA GGGTAAGCCC AGTACTCATT GTACATAAAT  
97451 TACTTATGTA ATGGCAGTAC TCTTAAGATT GCAGATGCGG GTATTTTCAA  
97501 AGCACTATTT GAAATACATA TTAGTAGACC TGACTATAAA AAGATTCTCT  
97551 TGTATTTCAA CATCCATCAA TAACTTTTA GCATCTTATT ACCCTCAATG  
97601 CAAGAGGTAG TTGGGTGGAG AGGTAGGACT CAGAGATGAT GTGGAGTTCC

97651 CAGTAAAGAG AAAAAAAGAA CCAGATGGGG CGAAACTTCA CTGGCGGTGG  
 97701 GGAGAGACAG CACAAAGCCT TCCCTTCCCT ATTCTTTCCT GTTTTGTAGAC  
 97751 TTCCCAGGGT AAGGCTGTAC AATTCATGAG TCCTTCTAA CCTTGTAATA  
 97801 GACCAATTT CCTCTTAAAT ATGGGGTACC CATTACCCTT CAAGACAGCC  
 97851 ACAGTCGGTC CAGGTGGAGC CCATGGGTAA GACTGTGAAA AAGAAGCTCT  
 97901 TGTCAAATCT AATAAGTGCA GTGGTGATTC CTTCCCACGC ATTCAGGTCT  
 97951 CGCTAAACTA GACATGCCCA TGATGCTTGG TGTTCAGAA AAAGGTGGTA  
 98001 TCACTTTTGT TCAGAAATGA AAATGAAAGT TCTGAGTGAC CATGAATTTT  
 98051 CTAAATGTG TTAATATCCA AGAAACCTTA AAACCGTTTA TAAGGGGAGA  
 98101 AGGAAGAGAA GCAATTGGAAC AATGTTGCGA ATTGTAGAGG GCCTTTGAAA  
 98151 TGAAGTTCTA CTCCCTAAAG CTCATAAGGT GGGGGAATGT ACAAACCTTTT  
 98201 AAAAAAGTCT GTGAGTTCTT TGGTCAGTAT GCTAATTTCT CTGCCACTCT  
 98251 CCCTCTTTT CATATTCTC ACCAGGGTAT GGAATATTG CTCCGAGCAC  
 98301 TGAAGGAGGC AAAATCTTTT GTATTTTATA TGCCATCTTT GGAATTCAC  
 98351 TCTTTGGTTT CTTATTGGCT GGAATTGGAG ACCAATTGG AACCATCTTT  
 98401 GGGAAAAGCA TTGCAAGAGT GGAGAAGGTG TTTCGAGTGA GTACTGTGTC  
 98451 ATATTTAAAT TCTAACCCT GCGATCCAAT TGGCTTTAGC CTGACAGGAT  
 98501 CCAGGAGGCA GTATCAGGGG CATTGTCTGC TTTTAAATGGA ATAATTTTAA  
 98551 TGTTATGATT GTATTTTCT GTTTTGGCCA ATGGAAGTCA AACATCTTGC  
 98601 ACCTAAACTC CTTCTTTGA GTAGCTTCCT ATTTTAGAGT GATATTTCTG  
 98651 CAATCACAAAC ACAAGAGGGT TAAGTATGGA TTTGCCAACA CAGATTTTTC  
 98701 GAAGAGGTGA GACAAGTTCA GTTCTCCTT CAAGATGGAA GATGGGGTTC  
 98751 CTCATTGTGT TTGTAATGAT GTAGAAAAT GTAAATCCAT CCATTTTGTT  
 98801 GTTGGAACTC CTTACTCCG TTTTATTTT AAGCACAGTG TCTTCAGGCT  
 98851 AATCCTGCTT CTTCCAGAAG CCTGACTTCT CCAGACACTG CTCTGTGCTT  
 98901 TGCACCTGTC TCCTAATGGT CTCTCTCTCT CCCATCTCTC ACTGCTGAGT  
 98951 GCTCCCTCAG AAATGGCATC CTGATGTACT ACTTCTACT GAAGTGTGA  
 99001 TGATTGCTAT TGCCCTTAGTG GGTTTTTCC TTTCTGGAAT ATTTATCTTT  
 99051 AAACAAGAGA CAACTATCTC AACTCAAGGA ATTTATTTAC TAAAATTAAA  
 99101 ATTAATTAAT AAATTAATCC TGGCATTAGT TGCAGGCATG AGTGGCTGAG  
 99151 TGATTAAACC GGGGTTCCCA ATGCCCTTA ACTCGCATC ATTTGTATGC  
 99201 TTTCACAGAA CACCTGTTTT GCTCAGATGT AAGGTCACTT CTGCCCTCTT  
 99251 ACTCACCGCT GACCTAATTC TCAAGTCTTT CAAACCTTCC TCAGGGAATG  
 99301 CTTTCTTATG ATGACTTAAT ATTTACAAAT GACATTCTGA GGTCTTTTCC  
 99351 AGGATCTAGG AATGGTGGCC AAAGGCAGAT CAGCTGGAAG CTCTAAAGCT  
 99401 GTGCTTTTTT CCCCCTCTAA GAACCTTAA ACTTTGAGTT CAAGGCTGTC  
 99451 TCTGCAATAA TGGCTCATAC TTCTCTTAG AAGAATGCAA GGGAGCTTTC  
 99501 AGATGAGCAG TTTCAGAGGC TTTTAAAAA GAGTAGAATG GGAGGAACGA  
 99551 GGCACCATAG CTGGGTGAGC CATTTTTATA TCTCACTGAT CCTGGGTCAG  
 99601 CTGCCTCAGT TTAATCATCC ACAAAGGGG ATAGAATTG AATCTACTTT  
 99651 GTCAGGTTTT GGTGATGATT AAATGAAATG ATGTGTGGAA AAGAGCTTGT  
 99701 CATATAGGGC AGACATATAG AGCCCAGGGC TTCTGTGTTT CTCTCCAAGA  
 99751 GAAGCCCTCA TGGCAGGCT AGCCACTCAT CCGGGTTTCA TCTGAGGAGC  
 99801 TCTGTGGTGT GTGAGTTTAA CTGGAATGTC CCACAGCCTT TGCTCCTTCA  
 99851 TGCTGGCTGG CCGGTGGCCT CATTAGACTG TGCACCTGGG CTCCCCAGTA  
 99901 GTCTCCATGG AAACCATCAG TGCTCAGCTT CCCTGCTTTT CAGATGTTTA  
 99951 GTTCTTCCTA AACCAGACAT AGCAGCCCTG TCTCCAAGAA CTCTTTTGAA  
 100001 CTTCTTGGAA GCACCTTTT AGCTGTGCTG TCATGGCCCT CTGACTTAGA  
 100051 GAAAAAGAA TCTGGTAGTT TGAACACTCA GAACAGGATT CAATTGGGGA  
 100101 AATGACTGAT CTGGCATTTT TATTTTATG TAGCTTCTTT AGAGCTCAGT  
 100151 TTCTTTATTT GTAGAAGAAA GGATTGGACT AAAAGTTTTT GAAATCCTCC  
 100201 TTAGCAGAAA AAATCTAGT TACTATATTT GAAGTGATGG AAGAGGTTGC  
 100251 AATCATCTGG ACATCTGCTA CTAAATTTAG GGAATGATC TCCCCTAATG  
 100301 AATTTCCGAC TACAAATAGA GTATATGGTT CTCCTTCCCC TTGAAGCTGC  
 100351 GTCTCAAATG GACCATCAAC AGATTCTGAT ACAGAGCCTT AGAAACCTTT  
 100401 ATGCTGATTG TCCACTCAGC TCCTTGACAG GCCATCAAAG ATCAAGATTC  
 100451 TTTTAGGAAG GCGAGACAGT TGCATATTAT TGAATTGGCA GTGCACAATG  
 100501 AATGCATTTG CTGAGTATTG GAGGGTGCTA TTGGAAAGGG TGACCGAATT  
 100551 CCAGGGGGAA TGTAAGCACA CTTCTAAAT ATACGAACAA CTGATCTGTC  
 100601 AGCAGTTTGC TTGCTGCATG TAAAGTTTGT GTAGAAAATC TCAGTTTCT  
 100651 GCCATTGATT TAACTACAT TTAAGTCC AATTACGTTT AGGTGTTTAT  
 100701 TTGAGAAATG AAAATTGTAT AAGCTAACAA AGCTTGGGGT TGTGAATTTT  
 100751 TAGTTCTCAT GGGGAAGGT TTATGTATTT CTTCTGCTCA ATGAGTGTTA

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100801 AGCCCTTCTC TTGATCTGTT ATGTTTTCTC TCAGCTCTTG GGAAGAGAGG  
100851 ATTTACGGTG GAGTAAAAAT AAAATCTAAA GTTGGCTTTC TGCCGGGCAT  
100901 GGTGGCTCAC ACCTGTAATC CTAGCAGTTT GGGAGGCTGA GGTGGGTGGA  
100951 TCACCTGAGG TCAGTAAGTT CAGACCATCC TGGCCAAGAT GGTGAAACCC  
101001 TGTCAGTACT AAAAATACAA AAATTTGCAG GGCACGGTGG TGCATGCCTG  
101051 TAATCCCAGC TACTTGGGAG GCGGAGGCAT TAGAATTGCT TGAACCCAGG  
101101 AGGTGGAGGT TGCAGTGAGT TGAGATCGTG CCACTGCACT CCAACCTGGG  
101151 TGACAGGGTG AGCCCTGTGA TTAATCAATC AATCAATAAA TAAAGTAAAT  
101201 ATAAAGTTGG TCTTCAAGAT GCCTGAATCC TGAGGTGACC CTGTTTTGGG  
101251 TCCTTCCAAC ACATCCCAGG TCTGATCCTC ATTTTAAAGA ATTGCTGAGG  
101301 GATATTGGAT TACTTAGAAA TGCTTTTGGT TGCAGAATAA TAAATGCCT  
101351 GACTATTGGA GTTTTATGA CATGAATAAA TAAGAATTCT TCTCCTCTGG  
101401 AGTTCAGAAC TAACTGTGAA ATGGAGGAGT CAGATGGAGA TCAAATTGCC  
101451 AGCTTTATTG CTTATAAGCT GATCAGAGAA TATAGCTTTA GCTTTGTTTC  
101501 CGAAAGGGCT TACAGTCACT TTACCCTGAA TTAGGACCTT GCTGCTGCAT  
101551 TAGTTTTTCT ATTGCTGTGT AACATATGAC TACAATCATA GAAGCTTAAA  
101601 ACAACACTTT TAAATGGCCT TCTTGACCCA CCACTTAAAA TGTTTAATTT  
101651 TGCTCTCAGA TGATGTTTCA AAACAAAGGA AAGGTAAAAAG TAAAGGTGCC  
101701 AAATTATTTG CAGATGTGCA TAACCAAACC CAAATGAAAC TAAAAAAGA  
101751 ATGCTCACAA TTTTCTTTTT TTTTTTTTTT AAGTGGAGAT GGGATTTCAC  
101801 TGTGTTGGCA AGGCTAGTCT GGAACCTCTG GCCTCAGGTG ATCTGCCCTC  
101851 CTTGGCCTCC CAGAGTGCTG GGATTACAGG CGTGAGCCAC CACGCCCAGC  
101901 CACACACATT TTTTAAAGCC GGGTGTACAG ACCAAATAAC ATATTAACT  
101951 AGATGTAAG AAAGAACCAG AAGTGAATTC ACCAGAAAAAG ACATGCCACT  
102001 AAGACAGAAT GTAAATTCTG TAGAAACCAG AGTACTCAAT GCAGAAGGAT  
102051 ACTTTTCTAC CAGAAAGTGC TTGCCAACAA ACAACAAAC AAAAACGCCT  
102101 TTTACAGACC CAAGAGGGAT GCAAAGTTCT TTACTTAAGG CACCTTTAG  
102151 CCAAATCAAA TCACATATAA AGTCAAAAAG AACTCGCCAA AGGGAGGGAG  
102201 TCTGAGAATC TGAGAGGAGA GTCACCCAGA CAGAAGAGGC AACAGACAGA  
102251 AGCAGAGAGC AGAAAGGGCT CAGTCAGTAC TGCACTCAGT TCCAGGGACC  
102301 TCTCATTCCT CTGAGGTGCA CTCACTTTGA TCCCCTTCT GACACCATTT  
102351 ATGTCACCTT AAATAACATA CAGACAGAGG CTCATTGAAA GAAAATGATA  
102401 TTTACTCAGG GATGGGCATT GCAGTGGTAA CATACTGCC AGTTTAACT  
102451 ATGTGTGCAT TCAGGGAGGT AAAGCAAAAA AAAAAAAAAA AGGTTTTTAA  
102501 AGGAAAAATG AACAGGATTA CATAATTGTT TTGAGCTAAT TATCCTTGAA  
102551 TACAAGGATC AATAACAAGG GTGATGCCAG TCCAAGGTTG GACAGTCAGT  
102601 TGCTGGTAG ATGTCTTCGC AGAAATGCTT TTCTGCATAA CGAGGTGATG  
102651 GGTTTTGTGC AAGGTGTAG TTTTTCAGT CTTTATGAT AGCTCTTGTA  
102701 ATCAGGCATT TGTGCATGAG AATCCTTCCT TCCTGGCTTT CCCTGACTCT  
102751 GTTTGTGAGA GTTTTAAAGCA CAAGTAACCC CATTTTGATT CTGACAATTT  
102801 TCATGCTCCC AACACTCATT AACAATGGGT TAAGAATTTG AACCTTATC  
102851 TCACATAGCA AGAAGCCTGG AGGTACGTTG ACTCAGGCTT GTGCTATCAG  
102901 CTCCACAATG TCAGGTGTAT CCAGATTGTT TACCTCTTTC TGCTCTGTTT  
102951 TCCTTGGCAT GGTAGCTCTT CATCCTCAGA CTTGTCACTC ACATTGCAAG  
103001 ATGGCTGCTT CATGACCAAA TAGCACGTTT TCACCCAACC TCATATCAGG  
103051 AAATACAAAA GGAACCTCCT TAAAATTAT CTTTTTTTAG AGCAGTTGCA  
103101 TATTCACAGC AAAATGGAGG GGAAGATACA GAGATATCCC ATATCCCCTT  
103151 GCCCCACAC ACATGTGCAG TCTCCCTCAT TATCAACATC CCGCACCAGA  
103201 CTGGTACATT TGTACAATT TATGAACCTA CATTGATGCA TCATTATCAC  
103251 CTAGAGTCCA TAGTTTACAT TAGGGTTCAC TCTTGGTGTT GTAGAGTCTA  
103301 TGAATTTGGA CAAATTTATA ATGACATGCG TCTACCATTA TAGTATCATA  
103351 CATAGTATTT CACTCTCCTA AAAATCCTCT GTACCCTGCT TGTTCATCAA  
103401 TCCCCTTCTC CTAACCTTTG ACAATGACTC ATGTTTTTAT TAGTTTTGTC  
103451 TTTTCCAGAA TGTCATTAAT ATGGTTTGGC TGTGTCCCA CCCAAATCTC  
103501 AACTTATATC TCCAGAAAT CCCATGTGTT GTGGGAGGGA CCCAGGGGGA  
103551 GGTAGTTGAA TCATGGGGGC CAGTCTTTCC TGTGCTATT TCATGATAGT  
103601 GAATAAGCCT CACGAGATTT GATAGGCTTA TCAGGGGTTT CTGCTTTTGC  
103651 TTCTTCCTCA TTTTCTCTT GCTGCCACCA TGTAAGAAAT ACCTTTCACC  
103701 TCCCACCATG ACTCTGAGGC CTCCCAGCC ATGTGGAAC GTAAAGTCAA  
103751 TTAAGCTCT TTTTGTCCC AGTTTCAGAT ATGTCTTAT CAGCAGCGTG  
103801 AAAACGGACT TATACAGTTG TGTAGTTGGA ATCATACTGT ATGTAGCCTT  
103851 TTCAGACTGG CTTATTTTAC TTAAATATGG ATAAAGTTT CCTCTATGTC  
103901 TTTTCATGGC TTGTAGTCCA TTTCTGCTGG GTGGTGAATA ATATTCCATT

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103951 TTCTGGGTGT ACCATAGTTT ATGTATCCAT TCACCTACTG AAGGACATCT  
104001 TGTTTGCTTC TAAGTTTGG TAATTACGAA TAAAGCTGAT ATAAACCTCT  
104051 GTGCACAGGT TTTTGGTTG AACATTAGTT TTCAACTCCT TTAGTTAAAT  
104101 ACAAAGATGT GTGATGACTG GATTGGATGG TAAGAATATG CTTAGGTGTA  
104151 TAAGAAATTG CCACACTGTC TTCCAAAGTG GCTATACAAT TTTGTACTTC  
104201 CACCAGCAAT GAATGACAGT TCCTGTTGCT CCACATCCTC ATCAGCATTT  
104251 GCTGTTGTCG GTGTTCTGAA TTTTCTCAAT TCTAAGTGTG TAGTGGTATC  
104301 TTGCTTTAAT TTGCATTCT CTGATGATGT ATAATGTGGA GCATCTTTTC  
104351 AGATGCTTAC TTGCCATCTG TATATCTTCT TTGGTGAAGT GTCTGTAA  
104401 GTCTTTGGCC TATTTTAA GTGAGCTATT TGTTCTTTA TTGTTGAGAT  
104451 TTAATGTATA ATGTGTAATG TATTATTATT ATTATTATTA TTATTATTGA  
104501 GACAGAGTCT CACTCTGTCA CCCAGGCTGG AGTGCAGTGG TATGATCTTG  
104551 GCTCACTGCA ACCTCTGCCT CCCAGGTCA AGTGATTCTT CTGCCTCAGC  
104601 CTCCCAGTA GCTGGGATTA CAGGCATGCA CCACCATGCC TGGCTAATTT  
104651 TTGTATTTTT AGTAGAGATG GGGTTTCACT TTGTTGGCCA AGCTGGTCTT  
104701 GAACTCCTGA CCTCAGGTGA TCCACCTGCC TCGGTCTCCC AGAGTGCTGG  
104751 GATTACAGGC ATGAGCCACT GTGCCTGGCC ATATTTTATA TATTTTGAAT  
104801 TATATTCCTT TATCAAGTAT ATCCTTTGCA TTTTATATCT AGTATATCCT  
104851 TTGCAAATAT TTTCTCCAA TCTGTGGGT ATCTTTTCAT TCTCTGATA  
104901 GTGCTTTTAA CAGAGCAGAG GTTTTAAATTT TAATGAAGTC CAGCTTATCA  
104951 ACTATTTCTT TCATGGAGCA TGTGTTTGT GTATCTAAAA AGTAATTGGC  
105001 ATACTCAAGG TCATGTAGAT TTCTTCCAT GTTACCTTCT AGGAGTTTTA  
105051 TACTTTTGCA TTTTACATGT AGGTATGTGA TCACTTTTAA GTTGATTTTT  
105101 GTGAAGGGTG TTGACTTGT GTCTGCAGCC ATATTTTGT CATGTGTATG  
105151 TTCAGTTGTT CCTGTGCCAT TTGTTGAAAA GACCTTTTTT TTTTCTCTCC  
105201 ATGTTGTCGC CTTTGTCTCT TTGTCAAAGG TAAGTTGACT ATATTTATGT  
105251 GGTTCATATT TGGGCTCTCT ATTCTAGTTC ATTGACCTAT TTGTCTATTC  
105301 TTTCTCCAAT ATCATACTGT CTTGATTACT TTCGCTCTAT AGTAATTTTT  
105351 TTTTCTTTTT TTTTCTTTTT TTTTCTTTTT TTTTCTTTTT TTGAGACGGA  
105401 GTCTCGTCTT GTCGCCAGG CTGGAGTGCA GTGGCAGCAT CTCGGCTCAC  
105451 TGCAAGCTCC GCCTCCCGGG TTCACGCCAT TCTCCTGCCT CAGCCTCCCA  
105501 AGTAGCTGGG ACTACAGGCG CCCGCCACTA CGCCCGGCTA ATTTTTTGTA  
105551 TTTTGTAGTAG AGACGGGGT TCACCGTTT AGCCGGGATG GTCTCGATCT  
105601 TCTGACCTCG TGATCCGCC GCCTCGGCT CCCAAAGTGC TGGGATTACA  
105651 GGCCTGAGCC ACCGCGCCCG GCCACGCTCT ATAGTAATTC TTAAAGCCAG  
105701 TTAGTGCTAG CCTCCAATT TTTTCTTCT TTTTCAATAT TGTGTTGACA  
105751 TCAGTCTCTT TTATGGAAGA AAAATCTTTC CCAGAAGTTA CCCTGTAGAT  
105801 TTCCCTTCT GTCTCATGTA CCAGAATGAG ATCACATTAG CATCTGCAAG  
105851 GGAGGATAGG AAAGGAAGTA TCGGACAAAG GACGATAGTA TTGCCATAAT  
105901 GGACCAGTGA TTCTCAAAGT TTGGTCCCTC AACCTTAGGC ATCAGTATCC  
105951 CTTGGACCAT CGGCATCGGC ATCCACTGGA AACTTGTTAG AAATGAAAA  
106001 TATTGTGTTG CGTGGTGGGG GCGGTGGGGC TGGAGCTCAG CAATCTGTGT  
106051 TTACCAAGCT GTCCAAGTGA TTCCAATGCT TAAGGAGCAG AGGAATCATG  
106101 TTTATCTCTT TGGGGCTGAA CACATTGCTG TGATGAACAA AATTAGAATT  
106151 CTGTTAGCGA AGAAGTTGGA GTAAGCAAAT GATAACGCT CACATAGATG  
106201 TCAATTAACT GCTAGCCACT GAGATCACTC ATAGAGAAGA TGTCTTCACT  
106251 CTTCTTGTG ATAAATTAGG TGGCTGTTGG GATCCTTGAA TCAATCAAGA  
106301 TAAGCTAGCC TATCACAAAC AGCCTACTCC CACTCCTGCC AGATCTGCTG  
106351 CAACCAGGC AGCTTCTCAG GCTCAGGGG TAGATAGGGT GGGGAAACA  
106401 GCTGAGCGCT GCTTGCTGGC TCTTCAGAGC GTTGTCCCTC AGGTAGAGCC  
106451 CATTGGCCCG AGCTAGTTAC CAGGTCCCAT TCGTAGCTGC AAAGGGGGTT  
106501 TGGAAATGCAT TCTTTATCT CCAAGAATAG TAGTGGATGG TAAATTTGTT  
106551 GCGCACTGGT ATAGTCATGT TCATATGCTC TAAGATGCAC TCCTGGGTCC  
106601 CACTCTAGGG TGACCAGCCT TTCAGGAATT TAGTTCAGG TCGTTTGTGC  
106651 ATCACTCTTC GGGGGGAATA CTACTATTGT GAGACTCATA GATTTACAC  
106701 CTGAGAAAAT GGAGCTGTG AGGTGACTTG CCTGGATCCA CACAGTAAT  
106751 TGGTGGTAGG ACCTGATTA GAACCACTAA TCCTGCCTTA ACCTCTTCCA  
106801 GATGGGCTGA AAATATTAAT GTCAGATTAA TCTACACCAT GAAACCAATG  
106851 TGGAGTTTAG AATATTTTAG TATACCATAC TAATTAAAGT AAAAAAATT  
106901 CTTCTGAGT TCCCAGGGAA ATATCTGGGC AGTTAGCATC CCAAATATCT  
106951 GCTTATTTGG GATGAAGGAG GGCTGACATT GGATTCTGAA GCAGGTTTTG  
107001 GAAGCAGGCG GCCTCTTCT CCCCTGCTGT GGGGTAGCTG TCTTGCTGGG  
107051 CCAGGCTGAT TATCACTTGA TAGGATGCTG TAGGAAAACC AGTCAAATTC

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107101 TGGACTGATT CTCATTTTCT TGGCTCCAAG CTGGACTTTG GCCTCTGGTA  
107151 GGAAGTACCT GCTTCTTTTT TTCCGGCTCG GATCAGCAGG CTTTCTGGTA  
107201 TTTCTGTAA AACCAAGGA CACCTTTTTT TTTTCTTCTT TTTCTTTTTT  
107251 TGGCTTTCCC CCCGCCCAA GGATATGGCA GAAATGTTTA TTTGCTTATG  
107301 GATCCAAATG ATTCTGGGTG TCACTGACAA ATAATAAAAC ATTACCCTAG  
107351 ACTTACGAGT GCCAAAATTA CTTGGAAAAT TTAGAACAGG CCACATGTTT  
107401 AAGATGGAAG TGATGACAAT CTCAAAGTGC TAATACGGTT AAATTAGTGG  
107451 ACTGATCAAC CACTTTAGAT TCCAGGAAGG GGCATGTGGC GGAAGCCAAA  
107501 GACTCCTGCA GGCCTCTGCC ATGTGCCTGG CATGGATCAA GGAGAGGCTT  
107551 TTAAGAACAC AATTGGCAGG AAGCTTCTGT TTCTCCCAAG GCATCTTTGA  
107601 GCTAGCATTG AGCAGCAAAA GGGTTAACTT AAAATAATTA CTATTTCAAG  
107651 AGGCAGGCGC AGTGGTCCAC ATCTGTAATC ACAGCTCTTT GGGAGGCCAA  
107701 GACAGAAGGA TTACTTGAGC CCGGGAGTTC AAGACCAGCC TGGGCAACAT  
107751 AGTGAGACCC CATCTCTGAA AAAAAAAGA AAATCGAGCC CGGGCGTGGT  
107801 GGCTCATGCC TGTAATCCCA GCACTTTGGG AGGCAGAGGC AGGCAGATCA  
107851 CTTGAGGTCA GCAGTTTGAG ACCAGCCTGG CCAACATGAT GAAACCCTGT  
107901 TCCTACTAAA AATACAAAAA TTAGCCTGGC ATGGTGGTGT GTGCTTATAG  
107951 TTCTAGCTAC TCGGGAGGCT GAGGCAGGAG AATCACTTGA ACCGGGGAGG  
108001 CAGAGGTTGC AGTGAGCTGA GATTGTGTCA CTGCACTCCA GCCTGGGTGA  
108051 CAGAGTAAA CTCTGTCTCA AAAAAAAAAA GATTCAAATT ACTTGGGTGA  
108101 GGTGGTAAAG GCCTATAGTC CTAGACACTC AGGAGGCTGA GGAATGAGGA  
108151 TTGCTTGAGT CTAGGAGGTT GACACTGCAG TAAGCTAGGA TCACATCACT  
108201 GTACTCTAGT TTGGGCAACA GAATGAGGCC CTGTCTCTAA AAATATTTTT  
108251 AAGTAAAAATA AAAAAATAAA AATTATTATT TCAAACAGAT CAAAAATCCC  
108301 TGTTTTGGAA ACTGGGTATT ATTTTCAGCA TTGTAGGTTT AGCTACAGTT  
108351 TCCAATACCT ATTGGTAATG AAAAGTTCAA GGGTCTTGGC TGTGCACATC  
108401 AGCATTGCAC CCAAAGAGGC AGGGGAGGAG GGCAGAGTGG TAGGCTGTGG  
108451 CTTTAGTTTA AGAAATGGCT GCCTTTCAGT AGTGTAGAAA AGACACAATA  
108501 TCAGTGAAC TCAGTTTACC AGTGCCCAT TGTCTCTGGA GTATCTGCTT  
108551 CTATGTATG CCTGCCCTAG TACATAACCAT ATTATAAGTT CCTAACAACT  
108601 AACTCAGTAG GATTAATGTT ACATAATAAT GTGAGTTTAT TTATTATTAT  
108651 ATTGAGACGG AGTCTCACTC TGTTGCCCAG GCTGGAGGGC AGTAGCATGA  
108701 TCTCGCCTCA CTGCAACCTC CGCCTCTTGG GTTCAAGCGA CTCTCCTGCC  
108751 TCAGCCTCCT GAGTAGCTGC GGCTACAGGC GCGTGCCACC ATGCCTGGCT  
108801 AATTTTTGTA TATTTTTAGT AGAGACGAGG TTTCACCATA TTGGCCAGGC  
108851 TGGTCTCGAA CTCCTTACCT CGTGATCTGC CCACCTTGGC CTCCCAAACCT  
108901 GCCGGGATTA CAGGCATGAG CCACCACGCC CTGCCGTGAG TTTATTTTAA  
108951 TCAGAGAGAA GGCCCTGGTT TTAATGTAAA CAATTGCTTT CTTCCTTTTC  
109001 CTAGGCGGCA AGAAGGTAGG AAGTAATTAT TTGAAAATGC AAATAATTTT  
109051 AAAGCTTTAT CAATCAAGTC TGTTCCAAAT TAGTTTAAGG ATTTTCTGTA  
109101 GCTTTAATGA TAGGGCCAGA ATGTACATTT GGGGTGACCT ACATATATGA  
109151 CATCCACAAA ACAGACTACA CAACATTCTT TAATGACAGT CCATGACAGT  
109201 TTTTCCATGG ACGGCTCCTT CTTTCCCTCC TTCATTAAAC ATAGGATTGC  
109251 TCAGCCTCGA TACTATTGAC ATTTTGGTCT GGATAATTCT TTGTCATAGG  
109301 AGTTGTCTCTG TGAATTGTGA GATGTGTAGC AGCATCCCTG GGCCTCTACT  
109351 CGCTTGATGC CAGCATCATC ACTGCCCGCA GTTATGACAG CCAAATGTC  
109401 TCCAGACATT ACTAAATGTG TCCTCAGGGG CAAATCGCC CTAGTTAATT  
109451 TGACCATAGC TATACTGGGA TATAAGGGGA CAATTGCCCC AAAGACTACC  
109501 AGGTGCATGC CCTGGTCCCC TGTCCAAATC TTCCACACGA GCTCTGGTGC  
109551 CTCCACCAAT GATCCTAATC AGTTTTTCAG TGCTAGCGCC ATTCCGACTC  
109601 AGAACTCTCC TCCTTCAGAT GGGTCCTTAA AGAGGGCTTT GCAGATTTTA  
109651 TACTCCGGGA ATGAGATCAT TTCTACCAA GAAAGCAAAA ATGCCTGGAG  
109701 ACTTGACTCT GATGAGTACA CATAATGACA AATTGTCTG CTATTATTCT  
109751 TCACTAGGCA AACCATCTCA GCACTAACTT TAACTGACCC ATAGGGACTT  
109801 ATCTAATGTA TGGTTCTTCT TTCTTGGCTT ACCTTTCATA ACTGGCCAGT  
109851 ATCCCTTTGG TGTTTCTGTG TGTCTTCTGA GGTCAATATA GAACGTTTAA  
109901 ATGGCCTTTA AAGTGCATCT TCACTCTTTT CTATGCACAG TAAAGATATC  
109951 AAACATTGCC TAAAATAGAA CTACTTAAAA TACTGCCTGG ATAGCGTTTA  
110001 TCATTTAAAC ATTTTCCAGG TAGCTTTAAC AGAGTCTCTC TCTGTCTCTC  
110051 TGTCTCTCTC TCTCTCTTTT CCCCCCGCA AGCTTTGATC ACAGGTAACCT  
110101 TCTGGGAATC TGATTGTTAC TTTGGGGTGG GAAGTTATTC ATGAACATCT  
110151 GCATGCCAGA ACCTTTGTAG GGAGCCTTGG ATCGGTCATT TGTCTGAGAG  
110201 GATTTTGTG AGATAATACT GAGTATTATG GCACTGTGAT ACCAAAGCCT

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110251 AGATATAAGT CACTGATATG GTTTGGCTGT GTCCCCACAC AAATCTCATC  
110301 TGAAGTGTAG TCCCCATAAT CCTCATGTGT TGTGGGAGGG ACCCAGTGGG  
110351 AGGTAATTGA ATCATGGGGG AGATTATTCC CATGCTGCTC TTGTGATAGT  
110401 GAGTTCTCAT GAGACCTGAT GGTTTTATAA GGGGCTTTAA CCCCTTTGCT  
110451 TGACACTCGT TCTCTCTCCT GCCATCCTGT GAATAGGTGC CTTCCACCAT  
110501 GATTGTAAGT TTCCTGAGGC TTCCTCGGCC ATGCGGAAGT GTGAGTCAAT  
110551 TAAACCCCTT TTCTTTATAA ATTACCCAGT CTCGAGTATT TCTTCATAGC  
110601 AGTGTGAGAA TGGACTAATA GAGTCGCTAA TCTGTTTTGA GGGTTTATTA  
110651 TGCCAGATAC TGGGCTATCT GGGCTTTACC TAGAGTAAGC TGTACAGTAA  
110701 GTAACCCTGC CAAAGAGATC ATTATGTGTT CTTAATTATA TGAGTTTGGG  
110751 ATGCTTAGAC TGGTTCTGTG ACTTGTCCAA GGTACACAG CCCATAAATG  
110801 ACAGAACTAG ACTTCCAAAC TTGGTCTCCC TGCCCCAGAG TGCATGAATA  
110851 GACTTAGTCA TTCCACTATA TGCCCTTTCT TCTTCTCTT GCAATGTAGG  
110901 CATAGCATCT GATGGCTCAG AGGAGCCTTC ACAAAGGTT TAGTAAGACC  
110951 TGGGGACAGA TAAAATGGC TAGTTGAGAG AAAGATATTG GGCCTGTCTT  
111001 CATCTGCTTT AAAAGGATTT TAGTTTCTG ACTTCATGCT CTCTCTCAGT  
111051 GTGTTGAATT GCATCATAGC CTCTGGTTCT TTATGTATCT GCTTAGTTT  
111101 CCTAATACCA GCTCATTATT AGTTAATATC TCTTCTTTG TGTCTCTTT  
111151 TCTTGGAGGT TAATCTAAGA TTTAGGTGTC CCCTTGCTCA TGTCTGCTGC  
111201 TATGTACTA ATACAAAGAT GGGTTTATAT TCTGGTATCA CTATAGGACA  
111251 TTAAGTAA TGTCAAAAAC CACAATTACT TTTGTACCAA CCTAATAAAA  
111301 GAGGGGCTTT TACTGTACCA ATAGCTGACT TGTTTTGACC CACCTCTGCG  
111351 AGAGCAGTTG CCAGGCAAAG ATAGTCCCCA CTCTGTCTT CCATCCACTG  
111401 CTCTACTTTG TACAACCTGC TTAATGTTAA AAACAGGAGG AAATGCACAG  
111451 CTCAAAGCCA AGCCTCTTGG TGCCCTGAGA TAGCTGGCCT TGTCTCTCAA  
111501 AGCATTCTTC TTTTCTGCG CTCATCAGAA TGCCTCAATG CTCTGCTTCG  
111551 ATGGTTTAA GAGCATAGAG TGGCTTGGTG TGGTGACTCA AGCCTGTAAT  
111601 CCCAGCACTT TGGGAGGCTG AGGTGGGCGG ATCACCTGAG GTCAGGAGTT  
111651 CAAGACCAGC CTGATCAACA TGGAGAAACC CCATCTCTAC TAAAAATACA  
111701 AAATTAGCCA GGTGTGGTGG TGCATGCCTG TAATCCCAGC TACTTGGGAG  
111751 GCTGAGGCAG GAGAATCACT TGAACCTGGG AGGCGGAGGT TGCAGTGAGC  
111801 CAAGATCACA CCACTGCACT CCAGCCTGGG CAACACGAGT GAAACTCTGT  
111851 CTCAGTAATA ATAATAATA TAATAATAAT AATAATAATA ATAATAATA  
111901 AGTAAAAATA AAAGAGCATA GAGTTTGAGA CCATCACCAC CAAGATTTTA  
111951 ATTCCCACTG GGGATTTAAC TCAGTCTTAA ACTCAAGGTC TGCTATGTCA  
112001 AGTAGTATTA AATATCTCTT CCTTTTAAAGA GCCATTTAGC TCTTTCCTCA  
112051 TATCTTTTCA GATTTTGTGG TTTTCCCTAA GGCTTCTGAA ACTCTTAAAA  
112101 CATCTCTGAT AGAGGAAACT ATCTAGAAAA TTTTATGGGT ATTCAATTATC  
112151 AGTGAGGTCT TTCTCATTTA AGAGATAATC ACTTCTTAGA ATCCCAGGGG  
112201 TTTTCATTAAG TATTAATAAA AGGTTTATA TTTTGCATT TTGGGGCTAG  
112251 TGAAAGTCTA GTGATGCTTT AGGTCTACAA CATGGTAAAC TGTATTTAAA  
112301 GATTCACAGT GCTTTTGAGT TATGAATTTA ATGCAAGAAT TCTATTAGCA  
112351 ATCACATTTT TACTAGTATT ATAAAAATCAG CATAATAGGT GAATGATTTT  
112401 CTATGTTTCAT GCTTTATCAC CAATTTTCAC AGGTAGTATT GGTTCCTCTG  
112451 GAATGCACTG ATTTAATAAA ATATTAAATC TTTGCTCTCT TCTTATAGAG  
112501 AACTTTTAA AAAATTATCG TAATTTTATT TTTCTTTTAA CATTTAGCCT  
112551 CATGTTACTT CTGTGAGCCA AGCAAGCAAT GACCTACTTT GGTGTAGCTT  
112601 CTAACAAATT AGGTTCCTGA AAATTGAGAG GTGCCCTTAT TGAATTGAGT  
112651 GTGCTCATCA CGGAGCTGGG TGTGTGATCT ATGTGTTTAC TGTAGGATAA  
112701 GTTTTAGATG ACTGGCATGT CAGTAGTCAT TGATACTTTC TAGATAGCTT  
112751 TATGACTTTT TGCCCTAGGG AAGGGAAAAAT GTTTAGAATA CACATCATTA  
112801 TTGAAAGGTG TGCCAGTGTT CTGAACCATC ACACCCCAA GAGCCAGCTC  
112851 CCCTGGGAGG TGACAGTGTG ACAAGCATGT GCAGCCCAT GCTGAGCAGG  
112901 CTCTGATGGC TTTGCATAGT GAAGGGCTGC CAACAACTG CACTCTCCTG  
112951 AACTGAATCC AGCCCAGGAA ATGTGCATTC CTGTTAGAAG TGCATTTGT  
113001 ATTTCTGGG GAGAATGCAT TGCTTTGTAT TTTCTGAGAG GAGCTGCATT  
113051 TGTGCATCAT AAGTTTGTAC CTAATGGTTT TGCATATGT CTTGGAAGTT  
113101 TACTGCTGAG TTTTAGGCTC CTGCTCATAG ATAGCTGTAG TTCTCATCCT  
113151 ATAGGTGGTG GACCCCTAGG AGCCTGAGGT GTCGTTTAA AGGATCAGTG  
113201 AATCCTTTTG TGTTCACAGC ATTGCCAGTG GACAGAATAA ACAATATGTC  
113251 TCCTTAACAT GTGTGCTGCC CTTTTCCAAA TGTGTGTAGA GGGGTTGTCA  
113301 TCAATGATTC ATTTCAAGTT ATTTTAAAGG GTGACTCCCG AATTCATAGT  
113351 ATCTATAGTA TCTTTTTTTT TTCTTTTTTT GAGATGGAGT TTTGCTCTTG

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113401 TTGCCCAGGC TGGAGTGCAA TGGTGCGATC TTGGCTCACC GCAACCTCTG  
113451 CCTCCCGGT TCAAGTGATT CTTCTGCCTC AGCCTCCTGT ATCGCTGGGA  
113501 CTACAGGCAT GTGTACCAT GTGTACCAT GCCCAGCTAA TTCTGTATTT TTAGTAGTGA  
113551 TGGGGTTTCT CCATGTTGGT CAGGCTGGTC TTGAACTCCT GACCTCAAGT  
113601 GATCTGCCCC CCTTGGCCTC CCAAAGTGTG GGGATTATAG GCATAAGCCA  
113651 CCATGCCCGG CCTCTCTCTT TCTCTCTCTC TCTCTCTCGA TATATATATA  
113701 TATATATATA TTCTCACTAT CAGTTAGTAC CAAAAGTTCT ATTGTTGTGT  
113751 GGGGATCAAG GATATTTTAA ACCTTCAGAA GGGAGTGCCA TACTCAAAAG  
113801 TTGAGATCAC TGGTCTTTCA AGTTAGCATC AATTTCATG ACATTCTGGG  
113851 CTTTTCTTTT TCTGTGGATT TAACATTTTC ATCCTGGCCA TAGTCATTGT  
113901 TACAAAGATT TTTTTTTTTT TTTTTTGAGA TGAAGTCTAG CTCTGTTGCC  
113951 AGGCTTGACT GCAATGGCAC AGATCTCGGC TCACTGCAAC CTCTGCCTCT  
114001 CAGGTTCAAG CAATTCTCCT GCCTCAGCCT CCCAAGTAGC TGGGATTACA  
114051 GGCACCTGCC ACTGCCCTGG CTAATTTTGT TATTTTGTAGT AGAGACGGGG  
114101 TTTACCATT TTGTCCAGGC TGGTCTCAAA CTTCTGGACC TCATGATCCA  
114151 CCTGCCTCGG CTTCCCAAAG CACTGGGATT ACAGCCGTGA GCCACCGCGC  
114201 CTGGCCAGAA GTTTTCTTTT CCTCTAAGTT ACTCCAGGA GTTGGTAGGA  
114251 TACTTTAGAG CCTGCTTCAA GATTTTCTTT ATGCCTTTTT TTAATTGTGT  
114301 TAAAGTGTGC ACAACATAAA ATTTACCATC CTGTTTTTAA GTGTACAGTT  
114351 CAGTGGCATT AAGTACATTC ACATTGTGT GCAACCATCA CTACCATCAT  
114401 CTCCAGAACT TTTCCATCTT CCCAAATGAC AACTCTGAGT CTGTTCAATA  
114451 ATAACGTCTC ATTTCTCTCT CCCCAGCTCC CTGGTGACCA CCATTCTACT  
114501 TTCTGTGTCT ATGAATTCA CCACTCCGGG AACCTCATGT CAATGGAGTC  
114551 ATATAGTGTT TGTCTTTTGT TGTCTGCGCT ATTTCACTTA GCACAGTGTC  
114601 TTTAAGGCTT CATGAATATT GCACATGTGT CAGAAATTTCC TTCCTTTCAA  
114651 GGCTGAGTAA TATCCCCCTG TCTGTATATA CCACATTTTG CCTATTGTGT  
114701 TATCTGTTGA TGGACTTTTG GGCTGTTTCC ACTTTTGGT TGTATGAAT  
114751 AATGCTGCTA TGAACATGGG TGTATAAACA TCTATTCAAG TCCCTGTTTT  
114801 TAATTATTTT GGACATATAC CCAGCAGTGG AATTGCTGAG TCACATATAA  
114851 TTACAGATTT AATTTTCTG AGGAACCGTG ACACTGTTTT CTACAGTGGC  
114901 TGCACCATT CACATTCCCA CCAACAATGC CCAGGGATT TGTCTTTCCA  
114951 CTTCCCTACC AACACTTGCT TTTTCTGTG TTTTTTTTTT TTCCTTTAA  
115001 CTTTTATAGG CCCAAATGAC AGCGTTTGGT AAATTGCTGT CTGACTGCCT  
115051 CTAAGTCCTG GCTGCTCCCA TAGCTGCTGT TCTATCACTC TGGGGACTAA  
115101 GTGGAGAGGC TGTGCCGTTA GCCTTGCTTC CCTCTGCAC CTTCCCTGTC  
115151 TCCCTCCCTG CCCTAACCTA CAGCTGTGTC CCTGTGAGTC TTTCTCTCCT  
115201 ACTCGTCAGC TTGGGCCCTG TGCAGCAGAGC TGGTGGGAGG ACGGGTGGCT  
115251 CAGTGCCAGG CCGACTAGGG CCTCTGCATA CGGATGACAT CCAGTTTCCA  
115301 CCAGACCTTT TTTCTACTCT GAAATCCTTT TATTCACCCA ATCATGATTC  
115351 ACTTTTCTGT TCTTCACTGT GGCTGTTTCT TCATGCTCCT CGCTAGGTCA  
115401 ACTTGATAAA CAATTATCGA ATAACACTTT TTTGTGTGTG TTCTCAACAC  
115451 TATAGGGATA TGTGGCAATA AACAAGGGAT AGTCCTTTCT CTTAAGGAGA  
115501 AAACAGCCAT GCATCAAGAC CAGTGTCCAT AATATTGTGC AGAATGATAC  
115551 CAGGGCTAGG GCAGGCAGGC TCTGAAGTCA CACCACCTTG GGTGAATGAT  
115601 CCATGCTATG TCTACTTCTT ATCAGCTATG TGACCTCAGG CTGTGCCTCA  
115651 GTTTTCTTAT TTGAAAAAAT GAGGATAATA ATGGTTCTTG TCTGTTTGG  
115701 CACTTAGTTG ACATTGAGA GCAGTGTCTG CCACATAGCC TCAATCAATG  
115751 CTATTCACCTA TTATTGTAGA ACATTGTTAG CTATGGGAGC CCAGAGAGGG  
115801 ACTTGTTAAG TCTAGCTGTG ATATTTTACA TCACACAAGC ACCTGCCTTG  
115851 TCTTGCCAAT GGATTGTTCT GCTCAAGTAA AGCATAGGGG CTTAAAGCTA  
115901 AATGTTACTG TGCCTTTATT GGCCTGTATC CCTGTAGGAC CTGCTCAGTG  
115951 CTAAGTGCTT TGGAGGTGTT CAGTAAATAT TTATTGATTG TGAATTGATT  
116001 AGAGAGGAGA GAGACACGAA CCAGGTCTTT TTCCAAGCAC CCAGGATGTG  
116051 TAAGCTTCAC AAATGAAGAG ATGCTTGCTG ATGCTGCCCT CTGTCCTACC  
116101 CTTCTGGAA ATGGGCATGG AGGTGGGTGG GGCTGGAGAA GTGGAGGGGG  
116151 CCACAGAAAG GTTAGCGACA GAGAGAAAGA AACCCATGGG CAACAGGGTC  
116201 TGTATCTGGG ACGGGACCTC AGCCATCAAG CATGGCCTTG GGAGGAGAAG  
116251 ATGCACTGGC CGCGATGCAG CGAGCCCTTT CGAAAGGCAA ACAGCACAAG  
116301 CAAGAGTGCA GACGGCAGGT TCGTCGGCTC CTCTGGGGCT CCCCAGGGG  
116351 ATGCCGTGTC CATTCGGTCT GCGTGAAGGA GGCAGGTTGT CTTCTTCGTC  
116401 GTCGGCCACA CTTCACTGGC TGCAAGTGTT CACGCAGATG TGCTCATGTG  
116451 ATCTTACCAC ATACGCAGAT TCTAGTAAAA AAAGAAGAAA AAATCCAAGA  
116501 ATGAGTGAGA ATTTATTTTA GCTACATGCT GACTGCCTCT CAGCTTGCCC

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116551 GTGCTCTTAC CAGATCTTGA AAACAAGGGC CAGTTTGTAT TTTTATAAAA  
116601 ATGCATCAAA GTGTTACTAA AAGATCCTAA AGGAAGACTA AAGTTTCCTC  
116651 CGAAAAGAAG CCTGGCCCTT CAAATACCAA CAAGGGATCC TCGGAAGATG  
116701 GGTTTTACTG AGCTCAAAACA CTGTCTCTTC TGTTTAGATA CTGTATTATT  
116751 ACATCATTTT CCCTCTCAGA TTGAGTGATG TTTCTCCAT TATTGTGTCC  
116801 GTTCCTTGGC AGAAGTGAAT TTCACCATGA ACAACATCTG CAGTCTTTCT  
116851 ATACGAGCCT GGGGAATGCT TGAAAGAACT GATACTAAAT TATTATTATT  
116901 AATATTTGTT TGTCTACCTA TCCACTCCCC ACCCCAGGT CCCCTCTCAC  
116951 TCCCGAGTAG TCACAAATGG GTGTATCGGG CATCTCGTCT CAGTTGTCAG  
117001 GACTAGCCCT TCACTTCTA AACTATTTTG CAGATTAGCT TGAGCAATTA  
117051 GAATCAGGAA TAGATATCAT GTGGTTAAAA TAAAAGGGAA TTTATCTACA  
117101 ATTTGAAAT AGATTACAGA GAACTTCCAT GTGATTTTTT TAAAAAATA  
117151 AATTTTGCTG TGTACTATAA CAGAGTGGC ACCAGAGCTA ACAAAAAA  
117201 AGCAAGTATC AACATTTAAA ATGCAGTACA TGACATGTAA ATGCCATATG  
117251 GTATTCTTGC AATGTTATTA CCACCTTCTT TCTGGCATCC TTTTCTGAC  
117301 ATTGCTGTAT GCTTCTTGAC TCTGCTGCTC TTCAGAAAGC CTCAATTGTC  
117351 CTGAGCCCTT TAATCTGTA TTTATATTAG GTGTCTCTCT CTTTATCTA  
117401 CCCTTTGGAG GCTTATCAAC CTTTCCCCA AGGAAGAGGA AGAAGAGGAC  
117451 CTGTACAGAT GGCTGTATAA ATATGTGACA CCTGCTCCG TGAGCCACTA  
117501 TTGGAAGAGT TTAAGAGTTG ATGGTATTGT CCCCTGTCTA GAAGATGAGC  
117551 ACACATTTGC TTCTCTTCTC CTTTCTATTT TAAAAAATG ATCATGTGCC  
117601 TTTAATGATG TTTCTAGAAA TGTCTTGAAT TCAAATTATT TTCTATTTTT  
117651 AGGGAATAA AAAAGGAACC CACCAACCAA ATTTTCTGAA AAGATTATAT  
117701 GGGTCAAAAT GTTAAAAGTT TGTCATAGTT AATATTTCTT AAAGTAAGAG  
117751 CCTTGGTGAT CGTGTTTGGG GAGAAATCTC TGCTTCACCA CGGGAATGTC  
117801 AGTGGATCTC TGCCTTTGCA CTGAATGTGC CACATTCTTT CATCTCCAGA  
117851 CTTTTGCGTG TGATATTTAT GGTGTTTCAA ACAATGTCTG TACCTCCTC  
117901 CTGGTCTCAG CTCAAATGTC AGTTCCTTGG GGAGCTTTTC CTGACTTCTA  
117951 AATGAAGGTC AACACCCCG CAAATAACAT CTTGTAGACC CCAAGAATAA  
118001 CATTCTATCT ACTGTATTGA TGGTGGGCAT CCCCATCAGC CTATGAGTTG  
118051 TGTGAGGTCG GGTCCCATCT GCCTGTTTAC CACTGCATCT TCAGGTGCTA  
118101 GCACATGGCC TGGAAACCAG AGAGCACTTA ATCCATACTT GATGAATCAA  
118151 TGAATGAACA TTGCTAGACA TAACCTTATA CATCTTGATA TAGAAATGA  
118201 CCTTGAAGCT GGACTAGGTC CCAGTTACTT GAGAGGCTGA GGCTGGAGGA  
118251 TCAGCCCAGC TTGGGCAGCA TAGTGAGACA TCCCCTATCC CTCCTACTCT  
118301 CTTAATCCTG CACAATCCCC CTCTAAAAA AGATAAACAG AGTGACCTTG  
118351 GGCTGGCGCT ACTGTCGCG CCTGTAATCC CAGCACTTTG GGAGGCTGAG  
118401 GCGGGCGGAT CATGAGGTCA GGAGATCGAG ACCATCCTGG CTAACATGGT  
118451 GAAACCCCGT CTCCTCTAAA AAATACAAGA AAATTAGCCG GCGCGATGG  
118501 CGGGCCCTG TAGTCCCAGC TGCTCGGAG GCTGAGGCAG GAGAATGGCG  
118551 TGAACCTGGG AGGCGGAGCT TGCAGTGAGC CGAAATTGCA CCACTGCACT  
118601 CCGGCCTGGG CGACAAAGTG AGAATCTGTC TCAGAAAAA AAAAAACAA  
118651 AAAAGAGAGT GACCTTGAAA TCGAAACTAG TATTGTATGC AAATAAATGG  
118701 CAATGGGGAA AAAAGTTCT TAGGCTTTGA AGTCCAATTA TTTTGAATAA  
118751 AAGATGGGTC TGTAGGGAGC TGCTCCCTGC TAATGCTTAT TGCCAATGGT  
118801 ATTCTATGTC AGACACTTTT ACCTCATCAG GCTATACTTA GAAGTGAAT  
118851 TCTACAGACT TATCAAGTCA ATCTTCTTAA ATACAGTATA CAATTACCT  
118901 TCACCCAGTG GTTCTGAACC CTGTAATATC CAATATTCTT TTATAGCATA  
118951 TATTTATGAA TACTCCTTTA CTACATTGAA ATGAATTCA GAGACAGTGC  
119001 ACTTTGCCAA TACAGATAAT TCTGAAAAAT TCAATGCAAA TTTTCTAGCT  
119051 ATAATATAAA GGAGAAATAA ATGGAAAGTA ATGTTTCAAT AATAGGTGCT  
119101 CTGTTATGAA ACCCTAGGAG ACCTGCTGAA GCAGTGAGTC TTGGCATCTA  
119151 TACGTAGAAT GCAATATCTC CAAATGCAGA TTGGTTCAGG TATGTTGTGT  
119201 TGATGACTAA GATGTCACAA AGGACTTTTT CTCCAGTGGT GTGGTTTTCC  
119251 AAAATAGAGA ACAACTCTCA GCAAGGTTCC AGCTAATCTA TTTACATTAG  
119301 AGTCAGATT TTAACAAATT TGGTCAACTT TGAAAAGATG CAAACAATTT  
119351 GTGTGTGTGT CTTTACATGT AAAAGGGAGT TAGGTCTTGT GCTCAGATAA  
119401 TTGTAGACAT GAGTTTTTCT CAGTGGGACA TTCAAAGCTC ATGCTAAATG  
119451 TGGGATGGTT CTGTGATTTG TGGCACTGAT TGTGTATTG CAGGACATCT  
119501 GAACGTCTTT GACCTCTCC CAGTACATGC CAAACGTGCC CCTCCAGTTG  
119551 TGACAACCGC AAACACCCTA ACAAGTTTAG AGACCACCTC CTAGGGTGTT  
119601 GTAATCTAAA CAGGGTTATA AACAGAGCTT CCAGGGGGCT CCCATGTAAC  
119651 TTTCAAGAAT TTACATATTT AATTTCTATT CTCGTGAAAA TGGCCATGTT

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119701 CCAATAGTTA AGCCTCTTCC CTTGATGTAT TTCCCATGCC ATTAATATTC  
119751 AGTTCTATTC CACAAATATT TATTATATGC ATATGTGTGT GTACATCCAT  
119801 CTGACTATAC CTTTCTATGT TATGTACCTT TACTAGAATT CCAAATTATA  
119851 AAATCCTGTC AGTTTATCTC TTGCTAGATG AATGGTTTTA TTGTTTTTGT  
119901 AGAATATTTG CTTTAAACAG TACTCTCATA TTTTCTTGAG GTGCTAAAT  
119951 AGAGGAGGCA GCTGTAGAAA AATGCACTAC GGGCCAGGCG TGGTGGCTTA  
120001 TGCCTATAAT CCCAGTACTT TGTGAGGCCA ATGTGGGCGG ATCATGAGGT  
120051 CAAGAGATTG AGACCATCCT GGCCAACATA GTGAAACTCC ATCTTACTAA  
120101 AAATACAAAA ATTAGCTGGG CATGGTGGTG CATGCCTGTA GTCCCAGCTA  
120151 CTCGGGAGGC TGAGGCAGAA GAATCACTTG AACCCTGGAG GCAGAGGTTG  
120201 CAGTGAGCCG AGGTACGCC ATTGCACTCC AGCCTGGGTG ACAGAGTAAG  
120251 ACTCCATCTC AAAAAAAAAA AAAAAAAAAA GAAAAGAAA GAAAAGAAA  
120301 ATGCACTGTG CCAGGCACTT AGAACATTGA GATGAAGGAG CACACTGTGT  
120351 AGTAGGAGAG CACATGGATG GATGGACAGA CAGTGATGCA GGTGAGCAG  
120401 TTCTATGGAC AGGGGACCAT GCAAGGGTGA AGGAACATGG ACAGCAGAGA  
120451 GCAAGAACTG GAGAGGGCTT CCTGCAAGAG GTAATGTCAG AATTGTGTGT  
120501 GAGGAATGAA CAGGAGTCCG ACAAGCATTA AAAAGGGCGA AGAACCTTAT  
120551 CCTAGCAGAT GGAACAGCCC TTAAGGGG ACAGAAGCTA AAAAGAAATG  
120601 AGCTATGAAG CCATGAGAAG ATGTAGAGGA ATGCTAAATG CATATTGCTG  
120651 CGTGGAGAGG GCCAATCTGA AAAGGCTACA TGCAGTATGA TTCCAACCTAC  
120701 ATGACATTCT AGAAAAGTCT AAAGTATGGA GACAGTTACA AAGATCCATG  
120751 ATTGCCAAGA GCCTGGGGGA AGAGAGGGAT GAATCGGTGG AGCAGAGAGG  
120801 ATTTTATAGG CTTGGAAACT ATTGTGTATG ATACTATAAT GGTGGATACA  
120851 TGTCACTAGA CGTTTGTCCA AACCCTAGG ATGTACAGCA CCAACAGTGA  
120901 ACCCTAATGT ATACTATGGA TTCTGGATGA TATTGTCAGT ATAGGCTCAT  
120951 CACTTGTAA CAGTGCCTA CTCTGGCATG GGATGTTGAT AGTGGGGAAG  
121001 GCTGTGCATG TTTGGGGCGG GGGCTATATG GGAGATCTCT GTACCTTTCT  
121051 CTTAATTTTG CTGTGAAGCA AAAATGGTTC TAAAAAATC AAATCTTGAA  
121101 AAAGGCACTG AAGTATAAAA TGGAGCAGTA TTGGGGCACC AATAAACCAT  
121151 CCAGTCTCTC CAGAACTGCA AACTAACTGC TACTACAGCA AGAGAGAGGG  
121201 GTCAGCAACT ACCTGCCTGC AGCGGGGGTA GGGGGGAGTT GGGGGAAATG  
121251 GCGGGGGGTG GGGGTCCCTG ACAGTTTCCT CAGAAGTGGG TTGACGTATT  
121301 CTGGAGGAGG AGGAGGAGGA GGCAGCATGA GGCAGCAGGC AGGATGCATT  
121351 TCTTGAAGTG GATCATGGCC AGGTCCCTAC AGCTCTCCCA CTGCCACCTT  
121401 TGGCAAACAT TCCTGGGATC CTGAAGGCTC AGACAAGGCC CATCCCTCTT  
121451 ATGTTACCAT GGGGATTATC TCTTCCTCCT TTTCTCTTTT AGTTTTCCTT  
121501 CCAAGGAAGG GTTGTCACTC CTTTTCCAAA AGGAAGAAGG ACCAAGTGAA  
121551 TGATTTTCAA GGGCACAGTG CTGTTATTTT TCGAGGGAAC CTCTGCCATG  
121601 TTCTTGAGCA TGTTGCTCGT TTTCTCCTTC CTTTCTCTTC TTAGCCCTCT  
121651 CCCTCTCGCT CTCTCCTACC TCTCCCCCTT TTCTTTTTC TTTCATCACA  
121701 AAGACTACAA AGAGTATACA TGGTCACTGT AGAGGCCCTG GAAAATGCAG  
121751 GGGAGTGCAA AAGAGAAAGT AAAATCCTGT AAATATCCTT TGTCCAAAGA  
121801 AATCCACCAC TAAACGTTG ATAATCGTAC TTCTGAATCT TTTCTCTGCA  
121851 TCTACATTTG GCCCCAATGC CTGGTGTCTC ACTGGCCCCA CAGTACCCCT  
121901 CCCACCTGCT ACCTACCCTG TCCAAGTTTC CCTGCCCTCG GGTACTGGCA  
121951 GGGGTTGTCA CCGTGTCTTG GCCACAGCCT GTGCCTTCCC TGTGTACTTC  
122001 CATCAGCTCC TTCTGGATTG CTGACCTCTG CTCTAACCAC TGATCGTTCA  
122051 TGACAATTTT GCTACCCACC TTCTGCAGGT GACAGATCCT TCTGCCTCAG  
122101 AAGGGGAGT GCTACTGTCC TGCTGTCTTA GAGCTGAGGG AGACGGACAC  
122151 CACTCTCCCC GGTAAACACTA GATTCTCAGG AATAGATACA ACACCTTCCA  
122201 AACTGCAGCT GACACCAGCT GTACATTGTA ACAAGACTTT TAAGATTTAG  
122251 GAATGTCAGA GAGATATTAC CCACAGCAGT TACATCACAT CTGCTTACAG  
122301 TCTGGCTGTT CTTGGAGCCC AGAATTCAG GCCTGTCCA GGGTGTCCAA  
122351 TTGAGCTGTG TCCTTGACCT GCCTCGAGGC AGCTGAAGCC AGCTTGCCCT  
122401 GACCTCCAGG AGTAGCTGTT GCAGGCAGGC AGCTTAGCTC AAAATGAGAG  
122451 AAACATATGG CAAATTAAC AAAATGAAA ATAATTTTAA AAAGGATATT  
122501 GGATAGCTAC TAAATCCTTG GGATGGTTGG AAACCCAAAC TGGGAAGGTA  
122551 CCTTGTTAAA AACAATGACC AAATCACACC ATGGAAGTGG TCCCGGAGGA  
122601 AGCCACTGCT GTGTCTGCCC GGGCATATAC AGGGCGGTGG CCCCTGGATG  
122651 CTGCTGCAAG AACCATCCTT GTGACTGCTC CTGGAGTGGG GCATACCAAC  
122701 ATTGGTACCA CCATCCCTGG AATGGCTTCC ACAGGGTCCC TGTTCCTTTA  
122751 TATAACATCC AAGATATGTC TGCTCCTGCC TGCCACCCCA CCTCCCATGG  
122801 AAGCTCCCCG CTGATGCTTT CACTTCCATC TTGATCAAGG GCAAGGTTTA

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122851 CCTTCCATGC CCACCCCACT CAGGGTTCCA GTCCCTCACC CTCTGTCGGA  
122901 GGACCTAGGA GGATCCAGGA CTCTTGAGAG CTGGGCTGTG CACAGGTGGT  
122951 GAATCACCAG CAGAAAGCTC TGCATCTAGT CTCTTCTCT TGGCCTCCAG  
123001 ACTGGACGTT TTGCTTCCCA CCACCCACCC CCCGCAACCG GAAGACTCTA  
123051 GGAAGATCTC GTCCCTCCCA CTGTACTTTT GCTCCAGGCT GAGTGGCCAT  
123101 TCCGCTTCT CTCTGTCTGT GTTCCTAACC CGGTCTTGCC TACTGTCTGG  
123151 AAGAGGAGAA AGTGGTTCTG TAAGTCTGCC TCTGAGAATC TCCACACCTC  
123201 TTTTCAGAAAT GGTCTGGGGA GTGGCGGGTG CCAGTGAGAC GAAAGAGGAG  
123251 GACGGAGGAC AGAGGACTCT TAGATGACTA CTTCAAGGTT TAACCCTGTT  
123301 ACATCTGCAT GGGTGTGGTT CAAAGTCTGA ATTATGTCTT TATGGCTGGG  
123351 AAAGCCTGGG TCACATGCTT GTCTCCTCAT AGCAGGAGAG GCTGGGAAAG  
123401 TCAGTAGGTG GTACATTGCA GCTTCTGTAC TGGGAGGAGG TCTCTGTCTT  
123451 TCACCAAAT AAAGAAGGAT GTTCAAATTA TTGGTGGGCA AAAAGAATGA  
123501 CAAGGATCCT CTGACGTGGA CATGCCCTGT GATCACATTA GCTCTGTTTG  
123551 GTCACAGCAT GATAGTGGAG TGGCTTGGGC GACCTATGGC AGTATCATTG  
123601 ATAATCATTT ACCATACACC ACAGGCTGAG CGTCACCAGG GTTGATCCAA  
123651 TTCCATTTTC TAATCTTTCT CCTAACATGG GGTGAACATC AGGAGGCCTG  
123701 GAGATCTTCT TTTGTTGCTT TTAGATTCTC AGTTTCTGGT CCTCTGAGAA  
123751 GAACTGTTCA AACTGTTTCT GCATATCTCT ACTAAACACT TTGCAGGAGC  
123801 AATGGAACTCT AGAAGTGCAT TTTAAAGAGA ATACTCTTGT AAAGGAAATA  
123851 GTATCTACAG AGATGCAACC CTACCAAAGG GTGGGGCACT GTTGACTIONT  
123901 TTATCTTATG GAGCATGTGT CCCTGGAGTC ACAGCCTTGG GATGCCTACA  
123951 TCTGCTTTCA TTTGCATAGC TAAACAGCCC AGTCTCTTCA TGAAAGGTAA  
124001 TAGTCTACTT TATTCATTAC ATTTAGCTCC ATGAAAGAGT TTGCATATAA  
124051 CTTAATTGTT TTAAGAGGAA AAAATGTACC AATTAAGAGC CAGGACATTT  
124101 ATTATGCATG TTCAGCAATC AAAATAGGCT TCAGTGTAGC CTTCTATTTT  
124151 TTTTTTTCTT TTTTGAGACG TAGTCTCACT CTGTTGCCCA GGATGGAGTG  
124201 CAGTTACATG ATCTCGGCTC ACTGCAAGCT CTGCCTCCCG GGTTCAGGCG  
124251 ATTCCCTGCG CTCAGCCTCC CAAGTAGCTG GGATTACAGG TACCTGCCAC  
124301 CACACCTGGC TGATTTTGTG GTTTTGTAGTA GAGACAGGGT TTCACCATAT  
124351 TGGCCAGGCT GGTCTCGAAC TCCTGACCTC AAGTGATCCA CCTACCTCTC  
124401 GGCTCCCAA AGTGCTGGGA TTACAGGCGT GAGCCACTGT GCCTGGCCCA  
124451 GTGTAGTCCCT TCTAAGCAA TCCATTCTAA TCAAATGAAG GAACAGTGCT  
124501 CCTCTTAAT AATCATAAAT AAGTGATAGA TGAATAAGGA AATGAATCAT  
124551 GTATGCATTT ATTTGTCCAC AACACACAAT TGGAGCTGGC ATTTCTCTGA  
124601 GGCATTGTGA TAAACTTAG ATGAGATCAC GTCCCTAGG ATGTCAAGGT  
124651 ACTTGCCCTG ATCTGCCAT GAGGCCTCCA ATGGAACTT TGTACAGAGT  
124701 AGAAAACAGC CAATGTATGT GAAGTCCAAG TTCATTGGCA CCTCCCTAGC  
124751 CTCCTTGCAG GGTGTTTCT CTCCATCACT AATCCCCTGT TTTGGATCAT  
124801 TTGCAACAAC TCCCTTACT ACGAAGAGGG AATCTTGAGG TATGAGCAGT  
124851 AAATATGGAG ACTGTGGTAG GCAAACAGTT CCACAGTGTC ATGAGGTCCC  
124901 TTTTACACTC TCTCACTCTG TGGATTCTTT CCCCTTACA ACACGTCTGA  
124951 TTTTACCAA GCTGTGATTA ATTATTCTCT TGCATGACTG TTTAATGCTT  
125001 GTCTCAACTC CTACTAGCTC TGTGAGACTG GGGGCCATTT TGTTTTACTC  
125051 ACCGGTGAAG TTAGCTCAAT ATCTGACAGA GAGTAGGTAC ATGATAAATA  
125101 CTCATTGAAA AAAGGAATAG AAAAGTTATA GAGTTCAGCT ATATTATAG  
125151 CTTGAAAAAT ATGCTAAAGG AATTTTCTCA TTTGTAGGTG TTCCTGTCCA  
125201 GTTCCCTTAG TGCAGGCCTT CCCAGTGTAG GGTTTATTTT TGCATGACTT  
125251 TCTATAAAGC TGTATTCTCT TCTTATCTAA CTTCTCGTTC CTAGTCTAAC  
125301 TAGAAAGTTC ATGCATATCC CTTTCTCCCT TCTCTCCATT TTCTTTTAT  
125351 CTCTGAAACA ATTAGGTACA CACGTAGCTG GGAAGCCTTC TTGTATGCCT  
125401 CCAGAAAAAT TCTAGATCCC TCAAACATTT GTTCTATCTC TTCTTTCTGT  
125451 ACCCCAATTT TTTTCTCAAT TATGCTCTTA AATTATCCTT CTGAAAGATT  
125501 TTCTAATTTT GTTTGCTTCT TGTGCTCTTT TTCTCTTCTA GTTCACACAC  
125551 CTTTCTCTGT AGATTTCTTT AATGCTTATT TTATTATTAT TTATAGTTTT  
125601 ATGTGGACAA GATCCCTAG ATGCTTACAT TAAAGTATT TGTCTAAAAA  
125651 AAGAAGGAAG GAAGGAAGGA AAGAAGAAAG GAAGGAAGGA AAGAAGAGA  
125701 GATAAATATG GAAAGAAAGA GAAAAAAGG AAGAAGGAA GAAAGAAAGG  
125751 AAGAAGAAAG AAAGAAAGA AGAAGAAAGA AAGAGAGAAA GAAAGAAAGG  
125801 AAGAAGAGAA AGAAGGAAG AAGAGAAAGA AAGAAAAAGA AAGAAAGAAA  
125851 GAGAAAGAAA GAAAGAAACT GTCTATTGGG AAGGGCGTTG TTTACTGCTT  
125901 ATCCAGCAAT ACCCAGGTAT TTGTATAGGT GTTGACCTAA ATCTATCTGA  
125951 CCTTGAAGGC TGTCTCAAA TCTTCTAACA GGCAAGATAA ATAAGGTCAC

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126001 AGAAAATGCA TACCTGTTTG TCATTTACCT TTATTCCTGG GCCTATAGAT  
126051 AGTTCTTCTG TCTAGTAGCC TCTGGGCTAC TCATGGGAGT GGGGATAGGG  
126101 ATCAATAGAC AACTTTCTTC TCTTTTACGT GTTCTGGGTA CTCTTGGATA  
126151 CTGGTTCCAG GGAACAGCTG CATAGCTAAG AGATGGGTGG GAAGGACAAG  
126201 AAAGAGTAAA GTGTTCTTAG AGGAGCCAGC GAGGCAAGGG GTGTTTACT  
126251 GACCTAGTCT GTTTTATGGC TACATGAGAA CCCTAACACT GCTCTCCCT  
126301 TGCCCTGGCT GCTTTTCCAG GTTCTTGTC TTCCAGACA GCTCTAGCCA  
126351 GGGCTCAGGG TTCCTTAATG GCTGTCCCAA TCCACTCTTC TTTTAGCAGA  
126401 GCACCCTTAG CAAGAAACCC ACTGTAATCT CACCCTACTT TTCTGCTTTT  
126451 ACAACATGTC TTCCTTCCGG GTGAACATTC ACAAGCTAAA GAAGGGAAC  
126501 CACCTTCCCT TGAGGAGAGC TTGCTGAACA CCAGAGGATT TCACCTCTTT  
126551 CCCCCTTCAT AATGGAATAA TCACTGAGCT TTCTGCTAGA ATAAAAAAT  
126601 CATGGGCCGG GCACGGTGGC TCACGCCTGT AATCCAGCA CTTTGGCAGA  
126651 CCGAGCGGG TGGATCACTT GAGGTGAGGA GTTCAAGACC AGCATGGCCA  
126701 ACATGGCGAA ACCCCATCTC TACTAAAAAT ACAATCATT GCTGGGCGTG  
126751 GCATGCGCT CCTGTAATCT CAGCTACTCG GGAGGCTGAG GCAGGAGAAT  
126801 CGCTTGAACC TGGGAGCGG AAGTTGCAGT GAGCTGAGT TGCGCCACTG  
126851 CACTCCAGCC TGGGCGACAA AGTGAGACTC TGCCTCAAAA AAATAAAATA  
126901 AAATAAAATA AAATAAAATA AAATAAAATA AAATAAAATA AAATAAAATA  
126951 AAATAAGACA AAGGAGATGA TAAATTAAAG CCTAACATTA CTATATCCC  
127001 TTTATACTGA AGAATATGGT TTATATCTGT GGAAGATGA GTTTCCTAAT  
127051 ACAACCTCAG AATTAGATAG GAGATCACAA GGGGTAACCT CCAAAGGAA  
127101 GGGGAGAGGA AGGGCTGGG TTAACAGTTC CTGGGTCAGA ATAAGAGTTG  
127151 AGTGCCCATG TGTATGTCAG CAGGTGAGC TCCCTATACA AGGAAAGCAC  
127201 TGGGGCGGAA AATGAGCATT TATCCTATTA GAATGGTCTT GTGCCCTCAC  
127251 TCCCTGTGCA CTGCTTAGCC AGGGAACGT GCCCTTACAC CTTGTTAGCC  
127301 AGTGGAAGAA GAGTGAGTCT ACCTTTTAGC TGTCTGTAGC ATTGTTACTG  
127351 TAGTATTATT GTATGCTTCT GTTTATGATG GTGGAGAGGC CATTTGAGAT  
127401 GGAGGCATTG TTCATCATGC TGCTGAAATT TGAGTAGGAT AAATTTAGAA  
127451 TTTGGATAGG TGAGCAGCTG GGAGGGGCAT CTTTGGGAT TGTCAGGAGT  
127501 TACTCAGTTG ATGTGGCTCA TCAGCAGGTG TCCCATCTC CTTACCTTTC  
127551 CATGGGCTTT CTTTCATGCT TCAACCAAAG AGAAGGACCC TTCTTCAGTT  
127601 AAGGATTGT CTGGATGTTT TCTACATGTG GTGTGATCGC TTATGAGTTT  
127651 TCCTGCCTCT GAGACCTACC TTCTGAATGC CTGACTGACA AAGATTTAAA  
127701 GGCTGCTCAT TACAGTTGGC ATGCTTTTAT ATTCCACATG CCAGAGCTAC  
127751 AAGAATGTTA TTATTTCTCT TCTTCTCTCC CAGGTGATAT ATTTGGTCAC  
127801 CTAGGTGTCA TTAGGTACTA AGCTTTGCCT TCAATATCTA CCAGGTGGG  
127851 GCACCATGGA CAGTGCCACA AAGACCTTTT CAGACAAAGG CTCAGATCTT  
127901 CCTGCTGGAC TTTGTGTGCA AGAGGAAGGA ACTTTTCTT TTCTTTTTC  
127951 CCCTTCTCTC TCTCTCTCTC TCTCTCTCTC TCCCTCCCT CCTCTCTCC  
128001 TTCTGTTTCT TCCTTCCTTC CCTCCCTCCT TCCCTCGAAC TGCCATGTCC  
128051 CTGCAACTA GAATGGTCCC TGACATTTAA GGTTTTAAAT AATTATGTGC  
128101 AGAATGAATT AAATGCCAAA TCTTGTGTTC CAATAGCGTA TTATCTTCAA  
128151 ATGTTAACAG CAACCAGTTT TTTAGAATAG AAACTTTTG AAAATTTTAA  
128201 TTAAAGTCTT CTGTCAGTGG AACAGTTGAT TTTTTTTTTT TTTTTTTTTT  
128251 TTTTTTTTTT TTTTTTTTAG TCGGAGTCTC TCTCTGTGC CCAGGCTGGA  
128301 GTGCAGTGGT GCAATCTTGG CTCGCTGCAA CCTCTGCCTC CCGGGTTCAA  
128351 GTGATTCTCC CTGCCTCAGT CTCCTAAGTA GCTGGGATTA CAGACATCTG  
128401 CCACCATGCC CAGCTAATTT TTGTATTTT TAGTAGAGTT GGGGTTTCCC  
128451 CATGTTGGCC AGGCAGGTCT TGAACCTCTG ACCTCAGCCT CCTGAAGAGC  
128501 TGGGATTACA GGTGTGAGCC AGCATGCCTG GCCTGAGTTT TTATTATTTG  
128551 TGAATTTTAT TTTTTTCCAT CCCAGATGCA CCTATATTGG TAGTCTAGTG  
128601 ATAAAAACAA TTTACCCATA TATACCAACA TCTTTTCAA GAACTTTGCA  
128651 TAGTGAAACC AGCAAAGTAC TGAACCTGGC AGTCTGTCAT AGGTGTCTTG  
128701 CAACATGACT CAGAGTCAGA AGCTGGATAT AAACCTTTTT CTGTGTGTGT  
128751 ATATATGATC CATTGTGTA TTCGGCTTT GAGTGGGACT TTTTCAGTAG  
128801 GCTTCTTGAA GGTTCACCTT CACTATTCTC ACTGATGTGT GCTTACAGCA  
128851 TCTCTGCCAT GGAGATTTTA GGCAGAGAGT GTTTAAAAGC TCTACTCATA  
128901 GTTTATAGAA TTGCTAGTGC CACAAGGCCA TTCATTGTGG ATGATGAAAT  
128951 TATTAGTTAT AAGTGAACCT TCTAAAATAA ATCTTGAAG AAAACATGTT  
129001 ATAAGAAAAT GAAGTCAGTC CTCTTACTAG GCAGTCCCA TCATCTTTCC  
129051 ATTTTGAGAA ATTATCCTCA GTTCAGATGT ATTACTATGG TGATGTGTTT  
129101 GCATTTCAC AAACCAAACC AAGCCGTAAA CTGAGCTCTG CATGTTTAGC

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129151 TTCTGTCTTA GGATTTTAC CGCAGTGTCT TTATTCTTGA GTAAAATCCC  
129201 CGACATCCTG GCTAGAAATC ACAATGAATA AATAATTTC CAGCCAGACA  
129251 AAACAATCTG AATTGCTAAT CTCAGAATTC TAAGAAATTA CATAAAGATG  
129301 CAAACAATGG GGATTAAGA GGGGGTAAAA ATTAAATGAA AAAATAGCCC  
129351 ACAAATGAAT GGAAATATAC ATGCTCTCCA AAATAACATT GTGGAAGTAA  
129401 ACAAAAACAG ACAGAGAATT ATGCTTAATG AGAATTGGAC ATGTGGCTTA  
129451 GCCCTCTGAG GCCTGAAACA AGTAAACACT TCCCGAATTG TCAGTCCATA  
129501 CATCCCTCTC TCAAAAGAGA GCTCTTAGAA CTGGCTCCCT CTCCTCCTGT  
129551 TTACGAAGCT TACTTGGTCT TTGGAACAAT TGCACATATA ATTTTAACAA  
129601 CTAAATGAAC TCTACAGGAG ATGGGTTTG AGTACTTAAA AAATTCCTAT  
129651 AGTTTGTATC AATCAGATAC GGGAGATAGT TTTGCAAAAT ACTGTTTGTG  
129701 TAAAGAGAAG GGAAGACAT GCGCTCTAGT CTAACCAATC AACAAAGTGT  
129751 GAAAACACGA TTTAGACAGA AGTACAACGA CCATCCTATC AGTTCTACCC  
129801 AAATATCATA TCAGACCATC TCTTCCCTGA TAACAGTTT GTTAGCCTAA  
129851 GGACACATTA GCTCAGTTAG ATCTGGGCTC TCACAGAGCT TTCTGCTAGC  
129901 GGCTCTGCTT ACTGGTAAGT AAGCCATGCA ATTTTGCCTA GCAACCCAC  
129951 CGTGGAAACA CAGCTCCATT CTGTAAGTGG CAGGGGATG TGGCAGGGAG  
130001 GCAGGGAGAG TGAGGTTTGT GCCTCTCAGA ATCCCTCTGC AGCTGGTTCC  
130051 TGACATCGCA AACGTTATCT GCAATTCTTG GCAGTTTCGG AAGGATGATG  
130101 AAAAATGGGA CGGGGAGGTG GCTGAGCCTG GGGTTTGGGA AGTAGGATGG  
130151 AATTAATTGG AAGGCAAATA AAAAAGCTTC CAAGATTGTG AGCTGCGACT  
130201 GTCTGAGAGC TCAAACCAGA GTTGGCAAGA GGAACCAAAG GAGAATGAGG  
130251 ACATTTTGTG TCATTGACAA TGAGGTATAC AATATATCCA GGAAAGGACA  
130301 ACCAGCAGCG ACCTCCTGAA GCTAAACAGA GATTATCTTA AGCCACATAT  
130351 GAGGGAACAT TCCTCAATGG CAAAGAGAAG CATTAAACCT GGGACTGTCT  
130401 ACGTCTAAGG AAAAATTGGA GCATTTACAT TAAAATGGCC TGTTAACAAG  
130451 CATTGAATAT TAACCAGGCA CTGTGCTAAG TGTTCGACA CTTGTTAAT  
130501 CTTCCAAACA ATCCGATGAG GTGGGATTC TTATCTCCAT TTTATAGAGG  
130551 AAAAAAATA ATGCACAGAG AGGTTGAGAA ACTTGCTTAA GGTCACCTAG  
130601 CTATTTAGCA GTGGGTTGG GATGTGTCTC AGGCAGTCTT TCCCTAGACT  
130651 CTGTGCTCTT AAACACTACT ATGGTTTTC AGCAGCAGTG AACAGTTACA  
130701 GGGCTAATGG GGATAAGAAA ACTGAAGATC ACCACACGGC ACATGAGATG  
130751 GTTTGTGATT CCATTGTGAA AGCTGCAGTT TAAAATGTTT AATTAAGGCA  
130801 ACTTTTTTTT TTTTAAATA CCTAGAGGGC AGCAAAAACA TGGGTATCTA  
130851 GAATAACAGA TATTGCTAAA ACCTTACGCC CACAGCACTT CTTTTTATAG  
130901 CAAAGTATGG GTATACACAT ATTTTCATAC ACCTACACAC ACATACACAT  
130951 GCAAGACGCG CATTTCTTAA GTCCCTAAAA TACCCTGATA ATTAATGCT  
131001 CCAAACATTC TCTGAGTGTG ACCCTTGGAT GTCTAGGAGA AGCAGCCCAG  
131051 GAACACACTT GTTAGCCGGG GCAATGAGTA GTGGTGAAT GTTTACCTTG  
131101 CTGATAAAGT CTCCAGTAGA TGATGCAATT AAGATGCCAC GATCTAGCCT  
131151 TTGTTATACA CCTCCTTGTC TGCCGTCAAA CAAATCCACC GCTGTCTTC  
131201 CCCCTTTC TCCCTGCCA TCTCTGAAG TCCAGGAACG TCTCCAGCTT  
131251 CCTACGTA CTGAGTCTC TTTTGCCAAC CTCAACCTCA TTTAGATTGC  
131301 AATTACATTC ACATCTTAAT TTATGACTTA ACAAGCATCT CACAAACATT  
131351 TAATTCATTT TAATTCATCT ATGCATTTGA GGAGGAATAT TTGAGGAGGA  
131401 ATGGTACTCC CATTGCCAGC AATTAGATTG ACTTAATGAT CTATGGCGAA  
131451 ATCTCCTTTT GGGCTTTGAA CTTTTCATAC ATTTCTGCAA ACAAACCTAG  
131501 GCTAATTAAA GTAAGTTCCT GGATTCTCAG AGGGGCTTAC CTGCCTTCAC  
131551 AAAATCCTCC TGTAAATATCC AACATGGAAA TTTATGAAAT AGACAAAAC  
131601 TTCCCTGCAG TTTTCAGGTA ATTTATCTTG TTACGACACT TTCATGTGTG  
131651 GAAAAGTCGA TATTTTCATA TATAGTTTCA ACAATATCAA TAAATTGTAA  
131701 TTTTTTTTTC AGATGGCTTC TCTGAGGAGA TTAGGAGGGT TTCTATATCA  
131751 AAGCATAGAT CAAATTATTT TTCCCTGTTT CCATTTTATA TACCAGATGC  
131801 CTTCTTAGGA GTTAGAAAAG TACCTCCTTT TTACAAGGAA GGATGGCATT  
131851 TCTTTAGCTT TTCCTGGACA GATCACCCGG TGACCATTTT TTATTCTCAG  
131901 TCTTCCTTCA CAGAAGGAC AGAGGACTGC CCATTTTCAG CAGGAGTTAG  
131951 TCTGATTCTT TCTGTTAGAT GCAGACGACT TTGTTTGACA ACTTTCTTTG  
132001 GGTGGTGAA TTGTTGAATT ACTTGAAAAG CTGTTTCCGT TGTAAAGCAC  
132051 TGGACTGAGA ATTAATTACA TCAGAATTCT AATCTCGGCT CATTAGTGGC  
132101 ATCATTTTAT GCAAGTCCCT TAACCCCTCT TGGCTTCAGT TTTGCATGTG  
132151 TAAAATGAAG TATATAAAGC AAAGGTCTCT CTGTGCTTGG TGCGATGAAG  
132201 AGGATGCAGG TCTCATGGTA CGGATTTCTT ATATTGATTG CCCCAAATGT  
132251 GGTGTACGTT TGCAGAAAAT TCATCTAGGC AATGTAGAAA GGCCATACAT

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135451 TTTCCAATCT AAGGCAAAACA CATGTAGTGG CAGCTGGAAT TTTGAACTAT  
135501 TTCACAAACA TCTTTAAGTA TCCAAAGCAT AACCTGCAGT GGGTGGTGAT  
135551 TTAGAGCTCT CTGGGATAGC ACTGGGCTGT CCTGAGGACT GTCTATTATA  
135601 AGATACTGT GACAGACACA GATCTCTAAC CAATGGCTCA GTTCAGTCTG  
135651 TTAATCTGAG GCACAAATAG CAGAGGCCTG GGAGTGAGAT TTTTAAAGTG  
135701 ATGCTTTTAT TATTTGTTAT CTACCATGGA CTGAGCACTT AGTACAACT  
135751 AGTACTTTAC CTTATCTTTA CTTACCTAGT AAGGGCACAA CCTACACAGT  
135801 CCCAGGCATC CACAGTTTTA CTGCCCTTGT CAGTGATTAC AGAGCCATAT  
135851 TTCCTTTGTC CTGAGGTTTC TGTAGACCAC GGTCTCTTAA AAGTCACAGT  
135901 GCTGACTGCA GTTAGGCCAG ACCCCTTCCA AGCTCCAGTT TTCCGAGCTT  
135951 ACACAGACCA ATCTGGAGAA TGCATGCCTG AAAAGACTGG AAGTTTATCT  
136001 CTATCTTTTG GTAACAGTCT GCGAGTGATA GGAAGGTTG CCCAATCATT  
136051 GGAAAACGAT ACATTAACAA GAGTTGATGG TTGCTGTGAT TCGACATAGT  
136101 ATGAACTCTA CTAGAAATGT AATCAGATCA TTGATCCTGC AGGATTGATT  
136151 GCTGATTTAT TTTGCAGCTG ACTCACTTTA GGACAGCCTT ACAATATTTT  
136201 GCAACTCTGT CTGGGAGCAC ACACAGAACT CCGAATCCAG ATAAGCAGCT  
136251 CAAAAAGGGA TACTAGAAG GGTGTGACT GCCTGCTTCA TTGTTCTTGT  
136301 TTCACTAGCG CACCCTAGTG ACCATCTTTG CTGGGTAATA GTGACTTGCA  
136351 AAGGTAAATA TTTACTCCCA GATAGCCAC AGGAGAAAGC TACAGATTTT  
136401 TCTGGCGTAG CACAGAAACG AAATGAACCT CAAAAACCAC TTACTGGTGC  
136451 GGGAACTCAG ATCGTATCCT ACAGCTCTAA TGATGCAGGA GAGAGTTGTC  
136501 TGAAAGGAAA AACCAAAAGC AGCTGCACCA AACCGAAGGG GGCTTGGCAC  
136551 AGAGAAGTTG GAATTCTAAC GTTAAGAAGT GGCAGCAGCT GTCGAGCCTC  
136601 ATGGTCTGCT GCGCTGTGTT GCTGATTGGG TTTGAGCTTG TCGAGAGGAG  
136651 CCACAGGTCA CATTTCTTGC CCAGCTGCCT TTGCCGTAAG ACTCAGTGGC  
136701 GCTAGATGTG GTTACAACCT TGGTCTGGTG GGAAAGTCTG TAATCACTCA  
136751 TCACCTAATA CGATAGTTAC CAATCCATTG CTAGTATCTG TCATCTTAGA  
136801 AATGGCCACT GCCTGCTTCC TTAGGCAATA GCGTTTCCCA GAGAGAGATT  
136851 GAGGCTGATG TCCGTTATTT CCAGGAGCTT CCTCACTTCT TTAGGACGGT  
136901 GGGTTGGGCT TGCAACCTGT TTTGCATGGC TGCCTCCAGC AGTGTCTGTA  
136951 GGAAGGTTAG AATAAATAGG CTAATTATTC AGAATAAATG ACTGGTCCTT  
137001 TCAATGGAAC AGCCAGTCAA TGCAATCAGG CAACTGGCCA ATTTGGTTTG  
137051 ATGGATTTT ACTGTAATCC TTATTTATAA AATAAAGGGA TTGGCCTCAA  
137101 AGGTCCCTTT TAGTCTAGT TTATGGTGAC TCTAATTACT CAGCCTAACT  
137151 GACCCTTTGG AGTAGCACTA TGTAACACC ATTCTCAGT TAGCATTA  
137201 TCATATTGCT TTGCATCAA ATCCCAGTAA TGCCATTAAA GCTAATTTTA  
137251 CTTTCACACA TCCACTTGT TCTTAGTAAA TGTATGGGTG CTTAAGATGG  
137301 AAATGGTTCC AAGAATTCCA AACCATAGGG GGTGGTATGA TTATATTTGA  
137351 TTTTATTTAA AATAAATTTA GAGAAGTTTA AGAAAAACA ATGACAACCA  
137401 GGCTGATCT GTTGTCCTGT AGTTCAGAGT TATTCATCCT TAACGCTCAG  
137451 GTCAAGCATT AGTAGGTCAA GTTGGCCACT GGCCTTTTTT ATTTCTGGTA  
137501 TTAAGTTAG TGGTCAAGAA TCGAGGGAAG TAAAGCCTTA AGTTAGGCTT  
137551 TTTTGGGTAA GGGATGGGTA CCCCCCTTGC CCTCTAACCC CGGTCCACCT  
137601 TGTACACAGC AAACCTAACA GCTGAGTGTT AAACAATGAT GGATGACGTC  
137651 TTCACTACAT GGAATGGAAT ATGTGTTCTC TGCAAAGACC ATATGCTAGA  
137701 TCATGGTTAA AGTAACATTT GGTGTTTTC AGGGGGAAC GCTGGCATCA  
137751 ATTATCGGGA GTGGTATAAG CCCCTAGTGT GGTTTTGGAT CCTTGTGGC  
137801 CTGCTTACT TTGCAGCTGT CCTCAGTATG ATCGGAGATT GGCTACGGGT  
137851 TCTGTCCAAA AAGACAAAAG AAGAGGTAGG ACCCTTCTT AACCTATGA  
137901 ATGTTCTTGA GAACAGATGA GCTTGTGTCC AGAATTGCCT GTCTCTGTCC  
137951 TGTGGGCTGG AGTGTCTCTG GCTCGTTTTT GCAGGGGGAG CGGGGGGGCG  
138001 GTCATAGGCT TCCTCATGTT GAATCAGTCC TTCAAAGCTA AGGAGAATAG  
138051 AATACAGTTA TTTCTGGATT CTTTTTTTGG CAGGTGAGAA AATATGGTGA  
138101 TTCGTTTACC AGCCCATAAA TCCTGGAAAA ACTAGTAAAC AACAGCTGAT  
138151 TTTAAAAAAA TGAAAATGAA AATAAATAGG AGAGGTAGAC TATGGCTGAG  
138201 TGTGTGTGTG GGGGGGTGCA GCCTGTCCTT CCGGTCTCAG GGTCTGTGCA  
138251 GAAAGGCAGT TGAACGCCAA GAATCTTTC TGATTGAGTA AGAACTGAA  
138301 ATCATCGAAC ATTGACCAGC TACGGGGAAG TGAGCCCAAT GGGCCTCTTT  
138351 CACTTATCCC CTCTTGGTTG TCACATCCAT AGAGACAAAT ATACATCCCT  
138401 GAGGAAGGGC CGTGATGTA ACTTTACATG AAGGGAAGTA AAGGAAGACA  
138451 TATGAAGGAA AGATAGATTT TGTGATTAAA AAATAAATAT TCATGTAGCT  
138501 CTCTTAGGAA GAGAGGAAAA GAAAGGAGGA AGGCCAAGGA AGGAGAAAAA  
138551 AAAGAGCTAA AAGAAAGGAA GGGAGATAAG AAAAACCAAA GAAATAGAGG

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138601 GCCAGCCTCT GTTTGCTTCA TTCTGTATAA AAGGCCCCAG GAGAAAGTTG  
138651 CTGAATGGAG AGATTTCCCA CATCAGTTTC CTGGGCCCAT ATGCTAATTT  
138701 TCCTGTGTTA TATAAGTAAG CCAGGAAAGT AAGCAATGCA ATTTCCAGAC  
138751 CGGTTCCCCA GACAGCTAAC TGACCTGCTG AAAATCAGCT ATAACAAAAG  
138801 AGAAGGGAAC AACATGAATA TTGACTTTCC TGGATGCACA AATTTGAGTT  
138851 CCTCATTTGC AGAGGGAAGC ATGGGACTTA TACTGTCTGC CCTGTTCATT  
138901 AAGAGCCAAG AAATTGGGTG CTGATCCTCA GGCAAACTC CACTCTAAGG  
138951 AGGCCTGTTC TGTGGGCTTT GGCAGAATAG GCCGTCTTCC TGCACCCTGA  
139001 CTGGGGGAAG TGGGTTACCA GGTGCCCTGG AGCATCTTCT TAAACCAGGG  
139051 AAAGCCCCAC AGCAGATGAC CATAGCATGG CCCAGATAGG GTGGCCACCC  
139101 ATCCCAGTTT TCCCAGGACT GAGGGAGTTC CTAGGACACA GGACTCTGTT  
139151 TTAAACTGG GACAGCTCA GGCAAACTGG AACAAGTTGG TCACCCTGCC  
139201 AGGATAGAAA ACCAGAAAGG CAGGGAGGGC AGAAGGCCTG CTGAACATCT  
139251 GCTGTCCCCA GGACTGAGTG AGGTGCATTT CCTTGTCTCA GGTGAGCTAT  
139301 ATATGGTTC TCAAGTGAT GTTGGGGGAA TGAGGCCATG CAATTGATAA  
139351 GAGAGAGCTG GAAGCCAGGC CTGTCCAAC CCACATTTTA ACCTCTCCTG  
139401 CAGGATGCCG TCCCCCTCTC TTTAAGTCAC CATCTCCAAA TCTGAGGCTT  
139451 CTTGGGGTTG CCCACCACGT GTGTCTCCCT GAGCCACCTT ATTTACTAGC  
139501 CAATTAGGGA TGGGTGTCCA GGTGGCAGAA GTACTAGGGC AGAAGGTAGC  
139551 ATTTGACCTT CCCCCCTGGG CATGTGCTCC GTCACCTCCT GGCCTCCCCG  
139601 TGGGGACACC CGAGGCTGT GGGTGTGGG AGGCCAAGGC AGGGAGGCAT  
139651 TTGTGAGCAT ATTGTTGCTC TTCTGTCTCT TGGCCAGGTG GGTGAAATCA  
139701 AGGCCCATGC GGCAGAGTGG AAGGCCAATG TCACGGCTGA GTTCCGGGAG  
139751 ACACGGCGAA GGCTCAGCGT GGAGATCCAC GATAAGCTGC AGCGGGCGGC  
139801 CACCATCCGC AGCATGGAGC GCCGGCGGCT GGGCCTGGAC CAGCGGGCCC  
139851 ACTCACTGGA CATGTGTCTT CCGGAGAAGC GCTCTGTCTT TGCTGCCCTG  
139901 GACACCGGCC GCTTCAAGGC CTCATCCCAG GAGAGCATCA ACAACCGGCC  
139951 CAACAACCTG CGCCTGAAGG GGCCGGAGCA GCTGAACAAG CATGGGCAGG  
140001 GTGCGTCCGA GGACAACATC ATCAACAAGT TCGGGTCCAC CTCCAGACTC  
140051 ACCAAGAGGA AAAACAAGGA CCTCAAAAAG ACCTTGCCCC AGGACGTTCA  
140101 GAAAATCTAC AAGACCTTCC GGAATTACTC CCTGGACGAG GAGAAGAAAG  
140151 AGGAGGAGAC GGAAGATG TGTAAGTCA ACAACTCCAG CACAGCCATG  
140201 CTGACGACT GTATCCAGCA GCACGCTGAG TTGGAGAACG GAATGATACC  
140251 CACGGACACC AAAGACCGGG AGCCGGAGAA CAACTCATTA CTTGAAGACA  
140301 GAACTAAAT GTGAAGGACA TTGGTCTTGG ACTGAGCGTT GTGTGTGTGT  
140351 GTGTGTGTGT GTTTTAAATA TTCACACTGA GACATGTGCC TTAACAGAC  
140401 TTTTTAGTCC AAAATTACAT AGCATTGAAG AATATATTTT ACTGTGCCAT  
140451 AAACAAGTGA AAGCTTGCTC TGCCAAAAGG AATCAGAGAA CAAGAACTTC  
140501 ATTTAGATA GCAACGCAG GACACACCAA GAGTGTCCGT GCACGTAGCC  
140551 GGTTCGTGCC GTACATGTTA AGGGCATTTT AGTGGCAGTG CTGTACCCCT  
140601 GGGCAGTGCT ACCTGGGCAC ACACGTAGAC AAGGGCAGCT ATTCCTTAGA  
140651 CCAGCTCTCT GAAAGAAACA GGTGTGTCTT TTTAGTGGAG TCGTAGTAAT  
140701 ATGTGTCAC ACAGAGGGG ACCTGATTGG GTGGGAGCTG GTTATGTGTA  
140751 ACTAGCGTTG GAGTTGACAT TTTGGCATGT GCTCTGAGCT TGAATTTTGA  
140801 TACCAACCAT TCAGTGCATC ATACCTAGTC TTTCTATGCT CCAAATGAAT  
140851 GTCTGTGGGG ACCTGAGAGC ACCTGGAATT TGTGGAAGC AGATCAGAGC  
140901 ACACGTACGA AAAGGTCAA TTGCTTTTCT CATGACAAAA GAAAAAAAT  
140951 AATCACAAAC ACATCACACT GTGGATATCA CCTTAACCAA TGACAGAAGC  
141001 CTGCTGAGTT TGGTCTTTCT CACAGGGGTA GGTAGTCCAC ATGAACTGGC  
141051 GAGCAGTGGT GAAAACATGA CATCAACTGC TGCGTGGTTA AAGGCCAATC  
141101 ATGCATTTTC CTCAGTGGGT GCAATGGTGA CAATAAACTG ATTTGGAAAT  
141151 GTCCATGTAC TTTGGTTATA ACTTGTTTTG ATAAGAGGGG TAGAAATACC  
141201 AAAACAATTG CCTTGCATGA TGCCAGTGGC TTGCTGTCTT GTCTAGCTGA  
141251 TCCTACATTT TTACAAAAGT AGACATCCTG CATTTCTGAG ACACACTGAG  
141301 GAGGACCATG GCATCTTTCC ATCTCAGGGC TTTTGTGCCC TTGGGTGTCT  
141351 TAGGGTAGAC ATAGTGATAA GATCCAATCT CGTATCTCC AAACAAAAG  
141401 AAAATGTACC CCTTGTACAG TAAGCTTGAA ATGTTTTTAT TGCTTGACGC  
141451 GTAAGTGCCA TTAATTCAT TTAACAATGA TACTTAGAAA TATTTAAAT  
141501 ATTTTATTTT ACTTTTATGT TTGGGCATTC CTTTATTCTG AAAAAGTCAC  
141551 CACTGTCTCT TGCTTGTTC TACATCTCAC ATCGGTACT CACTAAAAT  
141601 GGAACACCTT AGACTGATTG TTCCAGGCA AACGATAAGC TAACACATCA  
141651 TAATTATGAT TGGTCTGTGA GGCTAGAACA TCCCGCAGAG GAAAGTCGGG  
141701 GAATGGCTAG TCATAGGTTG CATGATGATT TTAAATGGGT TTGTATCAGA

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141751 AAGGGGAAAA TACATACTCC TGTGTATGCC TCAGTCTTTA TCATAATTGG  
 141801 CTGGTTTACA GCTAGCTCTT TGGGCCACAC GTGAAAGCAT TTGGACCTGG  
 141851 CAACACCAGG CAGTTGCTGG TTATGGGTGT TCTAGGCTCA CTGCTACCTT  
 141901 TTACAGAGTT CACGGGATTT TACGTAACTA ACCCGCAGTG TGGATTTACC  
 141951 AAAAGATCAC AGCACTAGCG GAGACTTCCA GAAACTGTCT CATGCTTTCT  
 142001 GACCTCCAGG GAAAGTTGTA CCCACGACAT CCTCAACCAC TGGTACCATG  
 142051 GAAGACCTGT CCCTGCCCCAT TTCTCAAAAA TGCACAGCTC TTCCCTGCCT  
 142101 GGAGCACATG AAGTCCCATC TCCCTGTCCC CAGACCTTTA GGCTCTGTTG  
 142151 AAGTTCTGGC ATTGCTTATG AGACCCTTCC TGTCCAAGGA AGGTCTAAGT  
 142201 CAACTCCTCC ATTGGACTGG AGATGAGGCT CACTGGTGAC ATCCTGTGTC  
 142251 GACTCAGTAA TAAATAGTCA CTTGGGAGGC GATGTTTATG CAGGTGTGGA  
 142301 TGTTGAGTTT TACTATGGGA ATCATTCCAG CCTGACAAAA TGTGTTTTAA  
 142351 GGAATAGGTA GATAACTGGG ACTTCCTCTG TTATTCTAAC AAGTCGAAGC  
 142401 TTCCTAATTA AACTGTCCAT GGATCTCACT TATTTGGTTT CCACTCTGTG  
 142451 TTATCTGGTA CGTTCCTTGT AGCAGTGTGT TAAATTTCCA GGCCCTACGG  
 142501 CCAAATCTGG CAGAGGCTTC CCTCTCATTT ATCCAGTGCC TTCTGTGGGC  
 142551 CAGGCACAGG ATTAGGCACT TTATGAACGT CAGCTCATTG AAACCTTCACG  
 142601 ACACTATGTG GGAAGTATTT GCAAACCCAT TATATACACA AGGACACAGA  
 142651 GGCTCAGGGA AGCTATGTTA TTTATCCAAT GGCACACAGC AAGAAAGTGG  
 142701 TAGAGCTGGT ATTCAAAGTC TGACCAAAGT CTGCTTTCAA CTTCACTACA  
 142751 GTGTCGTGTG CATGCATCCT TGTGATTGTG TGTGTTGTG TGTATGTGTG  
 142801 TCTTTCTAGC TTCATGGACA CAGCTTACAG ATGTGGGGAG CAGATATGGT  
 142851 GGAATCTCCA CCACCAAGAG GGCACAAGGT CTTTGTGTAA ACATGGCTCA  
 142901 AAGGGTTGCC CCTGCAGACA CCTACTGTAC ATTTATTTGG TTTTGGAAAT  
 142951 TTTGTATGTG GCACCCTTTA AAAAATGCCC TTTGAAAGCA CTCTTTTGCA  
 143001 CTTTACTTGC TAACTTTGTA GAAACTCTGC ATACAGCAGG AATAAAATAG  
 143051 TTCAAAGCAC TAAGCTGCAT ACTCTACCAA ATGGAACAGG TGCATGTGTT  
 143101 GGTATGTGCA TAGATGCTTC CCCAAATGAG TCAAATCAGT CACACAGAGG  
 143151 GATCAAACAT AACCTTGGGC TGGGGGTGGG AAAATTTTCT ACATAACCCA  
 143201 TTCCCTGAGA CATTTGGCCA AGAATGTGAT GAACAAAATC AAAGAAGATC  
 143251 CTCTATGGTG ATTGATCGAT TAAATATGTG TGCAAAGTGT TTAGAAACCT  
 143301 ATGAAA

#### FEATURES:

Start: 3000  
 Exon: 3000-3051  
 Intron: 3052-62251  
 Exon: 62252-62601  
 Intron: 62602-84982  
 Exon: 84983-85100  
 Intron: 85101-98275  
 Exon: 98276-98436  
 Intron: 98437-133431  
 Exon: 133432-133618  
 Intron: 133619-137732  
 Exon: 137733-137875  
 Intron: 137876-139687  
 Exon: 139688-140305  
 Stop: 140306

#### CHROMOSOME MAP POSITION:

Bac accession #: AC026597  
 Chromosome: 18

#### ALLELIC VARIANTS (SNPs):

DNA				Protein		
Position	Major	Minor	Domain	Position	Major	Minor
981	G	C	Beyond ORF(5')			
1012	C	T	Beyond ORF(5')			
1990	T	G	Beyond ORF(5')			
3432	C	T	Intron			
4658	T	C	Intron			



4772	G	A	Intron
7738	A	C	Intron
9118	T	A	Intron
9192	A	G	Intron
9222	G	A	Intron
9734	G	T	Intron
9795	A	G	Intron
9853	A	C	Intron
10397	G	A	Intron
11198	G	T	Intron
11470	G	T	Intron
11534	G	C	Intron
11540	T	G	Intron
11557	C	G	Intron
11708	A	C	Intron
11953	C	T	Intron
11967	T	C	Intron
12172	A	C	Intron
12188	G	A	Intron
13472	-	T	Intron
13781	A	C	Intron
14031	A	G	Intron
14110	T	C	Intron
14248	A	G T	Intron
14676	T	C A	Intron
14981	C	T	Intron
16365	A	G	Intron
16827	G	A	Intron
17599	A	T	Intron
18093	A	G	Intron
18226	G	C	Intron
18467	-	T G	Intron
18511	-	A T	Intron
19107	G	A	Intron
19223	A	G	Intron
20102	T	C	Intron
21946	G	T	Intron
22240	T	C	Intron
22679	A	G	Intron
23178	T	C G	Intron
23370	T	G	Intron
23583	A	G	Intron
24159	G	A	Intron
24307	C	T	Intron
24493	T	C	Intron
24822	C	T	Intron
24946	-	A	Intron
24947	-	A T	Intron
24959	T	C	Intron
25321	T	G	Intron
27280	C	T	Intron
28062	G	A	Intron
29033	G	C	Intron
29302	C	-	Intron
31093	T	C	Intron
31454	G	A	Intron
31834	A	G	Intron
31936	C	T	Intron
31947	A	T	Intron
31980	A	G	Intron
32156	T	G	Intron
32161	A	G	Intron
32436	A	G	Intron

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32490	T	C	Intron
32526	G	A	Intron
32893	A	G	Intron
32900	G	T	Intron
33087	A	G	Intron
33474	C	G	Intron
33474	C	T G	Intron
33474	C	T G	Intron
33741	C	G	Intron
34043	G	A	Intron
34053	C	T	Intron
34297	A	C	Intron
37209	T	C G	Intron
37475	G	T	Intron
38476	A	G	Intron
38486	C	T	Intron
38576	A	G	Intron
38810	A	G	Intron
38825	A	C	Intron
39317	C	T	Intron
40519	A	G	Intron
41468	A	T G	Intron
41468	A	C G	Intron
41565	A	C	Intron
41625	A	T	Intron
41921	G	C T A	Intron
42152	C	A	Intron
42498	G	T	Intron
42715	T	G A C	Intron
42776	T	C A	Intron
43320	G	T C	Intron
43341	A	T	Intron
43424	A	G T	Intron
43509	A	G T	Intron
44584	C	T	Intron
46250	A	C T G	Intron
46287	C	T	Intron
46566	A	C T G	Intron
46653	G	A	Intron
47153	T	A	Intron
47171	C	T	Intron
47216	A	T	Intron
47484	T	C	Intron
47668	G	A	Intron
47698	C	T	Intron
48029	A	T	Intron
49334	A	G	Intron
49680	C	G	Intron
50056	A	G	Intron
51020	A	T G C	Intron
53750	G	T C	Intron
53753	A	T C G	Intron
53799	C	A T	Intron
53917	C	T G	Intron
54056	C	T	Intron
54402	G	A	Intron
54493	G	A T	Intron
54749	T	C	Intron
55396	-	C	Intron
55397	-	C	Intron
55703	A	C	Intron
55783	G	A	Intron
55806	A	C	Intron

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57433	G	T	Intron
57699	T	A	Intron
60173	C	G A T	Intron
62216	C	A	Intron
62830	G	C	Intron
63395	G	A	Intron
64019	T	-	Intron
64030	T	-	Intron
64104	C	A G T	Intron
64166	G	T	Intron
64408	A	G	Intron
64786	C	T	Intron
65120	A	G C	Intron
65703	C	T	Intron
66930	C	G	Intron
66951	T	G	Intron
68094	G	A	Intron
68124	A	G	Intron
68787	A	G	Intron
69668	C	A	Intron
69701	A	C	Intron
69773	C	T	Intron
70257	-	T	Intron
70261	-	T	Intron
70268	-	T	Intron
70941	G	A T	Intron
71359	G	T	Intron
72550	C	T	Intron
75313	T	A	Intron
75541	G	T	Intron
75957	T	G	Intron
76415	A	C	Intron
77872	T	A	Intron
78058	A	C	Intron
79799	A	G	Intron
80598	G	A	Intron
82609	A	G T	Intron
83645	A	G	Intron
83756	C	T A	Intron
84687	A	C	Intron
84761	C	T	Intron
84911	-	T	Intron
84921	-	T	Intron
85786	C	T	Intron
85903	T	-	Intron
85906	T	-	Intron
85908	T	-	Intron
85913	T	-	Intron
85932	A	-	Intron
86085	C	A	Intron
86585	T	-	Intron
86596	T	-	Intron
86601	T	A	Intron
89478	-	T	Intron
89488	-	T	Intron
91631	A	G	Intron
91898	G	C	Intron
93506	T	C	Intron
94409	T	C	Intron
94689	T	A	Intron
94856	G	A	Intron
95303	A	G	Intron
95373	G	A	Intron

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95657	A	T	Intron
96312	-	A	Intron
96315	-	A	Intron
96329	-	T A	Intron
96370	C	T	Intron
96372	C	T	Intron
96439	T	C	Intron
96468	G	A	Intron
96501	A	G	Intron
97217	A	G	Intron
97449	A	G	Intron
98167	A	G	Intron
98430	G	C	Exon
98846	T	C A	Intron
99326	C	A	Intron
99514	C	T	Intron
99680	G	A	Intron
99879	T	C	Intron
99971	A	G	Intron
100895	G	A	Intron
100927	G	C	Intron
102805	G	A	Intron
103462	G	T	Intron
103811	G	A T	Intron
105461	G	C	Intron
105981	A	G	Intron
106495	G	T	Intron
107077	G	A	Intron
107431	T	G	Intron
107671	A	G	Intron
108826	C	T	Intron
111310	T	A	Intron
112035	T	-	Intron
112038	T	- A	Intron
112066	G	T	Intron
114098	G	A	Intron
114293	A	-	Intron
114413	-	C T	Intron
114414	-	C	Intron
114692	C	T	Intron
115696	A	T	Intron
116153	A	C	Intron
116213	G	A	Intron
116507	G	A	Intron
116796	G	T	Intron
117142	T	A	Intron
118270	G	C A	Intron
118495	C	T	Intron
119314	A	T	Intron
119740	T	C	Intron
119899	G	A	Intron
119990	G	A	Intron
120169	A	G	Intron
120519	C	T	Intron
120812	A	G	Intron
121053	T	C	Intron
121246	G	A	Intron
121475	C	T	Intron
121715	T	A	Intron
122390	C	A	Intron
122606	C	T	Intron
122767	T	C	Intron
122957	C	A	Intron

225 V V

122963	G	A	Intron			
124458	C	G	Intron			
125449	G	A	Intron			
126753	G	A	Intron			
126957	-	T G	Intron			
126962	A	-	Intron			
128567	T	- C	Intron			
128567	T	- C	Intron			
128599	T	G	Intron			
128843	G	A T	Intron			
130388	T	C	Intron			
131191	G	C	Intron			
132702	C	T	Intron			
133422	G	C	Intron			
133447	C	A	Exon	233	Q	K
133956	T	C	Intron			
134132	C	T	Intron			
136253	A	T	Intron			
137206	G	T A	Intron			
137313	C	A G	Intron			
137335	G	A	Intron			
137951	T	C	Intron			
138206	G	C	Intron			
138207	T	G	Intron			
138210	-	G	Intron			
138805	G	C	Intron			
140339	-	T	Beyond ORF (3')			
140340	-	G T	Beyond ORF (3')			
140360	-	T	Beyond ORF (3')			
140366	T	-	Beyond ORF (3')			
141183	A	G	Beyond ORF (3')			
141545	A	T	Beyond ORF (3')			
142316	C	T	Beyond ORF (3')			
142436	T	C G	Beyond ORF (3')			
142719	G	T	Beyond ORF (3')			
142779	T	C	Beyond ORF (3')			
142931	A	C	Beyond ORF (3')			

Context:

DNA

Position

981

TTTGTTTGATTTCATGTCTTAGCCATCCTCCCAGTCCTAGTAGAGAGAGGCAAAGTGTG  
GTTACAGAGTCCAGGGAAGATGGTTCTGAAGCACCCGGAACCTGCCTAAAGGGCTGAAG  
AGTCAGAGTAGCACCATCAGATTGGTACCAGTTTTGCCTGAACGGGGTTTGCAGAGAATT  
CAGGGCTCCAGCCTGGGGTGCCTGTGACAGCCCAGTGACAAAGCACTCACCTTTCCACAC  
GACCACAGCGGACCTCTGTAGGTCTTGCTCTTGGACTCAGAAACCTTGATGTGATAGTGA  
[G, C]  
GGATGGATGGTGAGAAAGATGCTGTGACACAGGGCTCCCCAGAAGCCTCAAGGTGCCGT  
AGAGTAGCATGCAACTTAGAGATCAGCTGCTAGTGTGGGATTTTAGGACCCAGCTGGCA  
GGCATAGGAATGAGCTGGGCAATTTCTATGCGTAAGTAAAGGCAACAACAATCTAACAGG  
ACCTTATGGCACTAGATAGTAAGCCCCATGAAGGCAAGATCTCTGTCTTGTCTCTGCCA  
TATGGCCAGCACATAGCACAGTGTGGCACTTGAAGGGGTTCAATATATATGTTGAATG

1012

CCAGTCCTAGTAGAGAGAGGCAAAGTGTGGTTACAGAGTCCAGGGAAGATGGTTCTGAAG  
CACCCGGGAACCTGCCTAAAGGGCTGAAGAGTCAGAGTAGCACCATCAGATTGGTACCAG  
TTTTGCCTGAACGGGGTTTGCAGAGAATTCAGGGCTCCAGCCTGGGGTGCCTGTGACAGC  
CCAGTGACAAAGCACTCACCTTTCCACAGACCACAGCGGACCTCTGTAGGTCTTGCTCT  
TGGACTCAGAAACCTTGATGTGATAGTGAGGGATGGATGGTGAGAAAGATGCTGCTGACA  
[C, T]  
AGGGCTCCCCAGAAGCCTCAAGGTGCCGTAGAGTAGCATGCAACTTAGAGATCAGCTGCT  
AGTGTGGGATTTTAGGACCCAGCTGGCAGGCATAGGAATGAGCTGGGCAATTTCTATGC  
GTAAGTAAAGGCAACAACAATCTAACAGGACCTTATGGCACTAGATAGTAAGCCCCATGA

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AGGCAAGATCTCTGTCTTGTCTCTGCCATATGGCCAGCACATAGCACAGTGATGGCACT  
TGGAAGGGGTTCAATATATATGTTGAATGAACAACAAATTTTAGTAACCTTATCTGGAAG

1990 CGCTTTCTCCGGGGCCCCCGTGCCTCTCTCAAGCCTCCTTTCCAGCCAACGACCAGCG  
GCCCCAGTCCGGCTGCAGGTAGCTGGGGAAGGGACCAAGCTGTGCCTTGGGAGCGAGCTT  
CCCCGGGCGGGGAGAGCGCAGCAGATGCGGAGCGGTCCCAGAACAAAAGGCTCATGGCTG  
GCACGGGCCTCCTTGGAGTGCGGCGGGGACGTGGGTTCTGGGACTCAGGCGAGAGAGCCAG  
ACGCGGGAGGAAAAAAATGAAGTGAGAAAAGAGAAGGAGGGAGAGCTCAGGGTGAGAGC  
[T, G]  
GTGAGAAGAGGTGACCCGGAGGCCGAGGTCTGCGGCGGAGCCGAGCGGCCCTTCCTCCG  
CCTCCTGCAGCGCCTTCCAGGCAACCAAGCGTGTCTCCGGCTGCAACTCCAGCAAGCGCG  
CCGCTGCCGCCTCCACGCCCCGCGCCGCGCCGAGCCAGTAAGTAGCGGCGCGCCCA  
CCGCTCGTTCCCGCCCCCTCCGCGGCTTCCCGGCCACCGCCACCGCTCCCGCCGCCCC  
GCGGGCAAGTCCGCGACCGCTCCCGCTGCCCCGAGCCGGGTGCCGGGGGCTCAGCGCGC

3432 TGCTTCTGGCAGCGTGTGTCTGAGGCTGGGAAATGCGCCTGGGAACTGCAGCGCGGGTG  
GGAGGAGGGCGGAGGCAGCGTGGGTTCCGAACCCAGATAGTGCCTGTCATTACCACATAA  
TCATTGTCCCTCCTAGATTGTCTCCAGATCTATTTAGATAGACCAAGCCGACTGTTTGGT  
TTGAAATTGCAAGTGTGCGTATTTGCTTTTGACTTTGAGTGTGCGAGTGTGTGTGTGT  
GTGTGTGTGTCTCTTTGTTTCTGGTGATCTTTGTCTCTCTGCGAGATGGGTGGGGTGCT  
[C, T]  
CCCCCTGGACCTGGAGCTGCGCCGCATGCCCGGGTGTCTCAGTGGGAAAGGTTTCCTGG  
CAGCAAGTGGGGCTCGAGTTGCAGCAGCCGTCCCTAGGGGTGGGCCGTTCTCGCAGGGCA  
TGCAGAATAATGGAGCCACAGGGCCTCCTGAGTCTTCGTTCAATCTTATTACCAAACTT  
AGCAGCTAGTTAGGCTCAGGTGAGGTAGAAGCAGGAGGAGGGGTGGTTTGTGAGAAGGG  
TGGGGCTGGCAAGGCATAGGGGAGGGGCACGAAGTGTGCCCGCCCAAGCAATGGTGTGGT

4658 AGTTTACAGTGAGGGAGACAGACCTAAATCAATTCCATGGAGGAATGCATAATCAAAGT  
TTATGTATGCTCCAGGGAGAGCATCAGAGGTTTAAAGAAAGTGTCTGATAGAAGAGATTGA  
CAAGGACCAGAGAAAGGCTTCCCTGAGGACATGACACTTGGACTTAGGCCTGGAGGATGTA  
TAGGAGTTAATTGTCTAAGGAGGAGGGGAATTGTTGCAGAAGAGGGAACAGCAAGTGCAA  
AGGGCCTGAGGCAGAAGAGGTATGTGTATATGATGAACTGAAAGGAGGTTCCTATGGCTA  
[T, C]  
GGCAGAGTGAGTGAAGAGGTATTGCCTTTTTTAAACACCCAGGCTGTTATACTGTAAATA  
CAGCACAACCTTTCATTTTGTCTCTATTTGAAACCTCTGGAAATACGGAAGTGTGCCTT  
GGCTTTCTTTTGGGAAATCCCTGAAAAATGTATTTATCCCTAGCAGAGAGCAAGAGGGCT  
TGTGTTTTGAGATATGACTGGGGGATCCACAGGCGAGACGCCCCCTCCAAGCCCTGTGT  
TGTGAGGTGGGGTAGCATTTGTGGGGTTGGAAGAGTATAGTATTTATCTAAAGCCAATG

4772 GATTGACAAGGACCAGAGAAGGCTTCCCTGAGGACATGACACTTGGACTTAGGCCTGGAG  
GATGTATAGGAGTTAATTGTCTAAGGAGGAGGGGAATTGTTGCAGAAGAGGGAACAGCAA  
GTGCAAAGGGCCTGAGGCAGAAGAGGTATGTGTATATGATGAACTGAAAGGAGGTTCCCA  
TGGCTACGGCAGAGTGAGTGAAGAGGTATTGCCTTTTTTAAACACCCAGGCTGTTATACT  
GTAAATACAGCACAAACCTTTCATTTTGTCTCTATTTGAAACCTCTGGAAATACGGAAGT  
[G, A]  
TGCCTTGGCTTTCTTTTGGGAAATCCCTGAAAAATGTATTTATCCCTAGCAGAGAGCAAG  
AGGGCTTGTGTTTGTGAGATATGACTGGGGGATCCACAGGCGAGACGCCCCCTCCAAGCC  
CTGTGTTGTTGGAGGTGGGGTAGCATTGTGGGGTTGGAAGAGTATAGTATTTATCTAAAG  
CCAATGAAGAGTTTCAAGACGAGGAGTGACATGATTGAGCTAAGTTTCAAACAAAGTGC  
TGTGTGGCTCTTGTGGATGTAGGGGACCAGATACAATGGTAGCATGGGCCAGGGTGGTTG

7738 TTCTCTGTCTTGTATTATGCCATAACCCAGTGCCTTGAAAGTGCCTGGCACTCAATAA  
CCCTTTGCTGAATGAATGGAAGGTTGGCAGGATGGACTGGAGAGGACTGAAGGCTTTATG  
CCTCATGGAATGTCAGGACGCCTCTCAGCTATAAATGGCAAAGTACAAATAAGGAGAAA  
GGAAGAATATCCCCAAATAGTGGCATATCAGAAAGGACGCTGATATCCCCTTCCCTTGC  
AAGCTCCAGCTCGCTCTAAACCTCCAGTGCGCTGTTTTCCTTCTTTCTCGTCTTTGACC  
[A, C]  
GAAGTAAGAAGGCTGAATAGAAGTGCAGTGAGGGTGGATGGGTGGACTGATCTAGCCTGC  
TGAAGATATGGTCAGTGTCCAATAAATAATTTGGCTCATATTAGCTATTGGAGTGTGGCT  
ATTTTATAGGCACTTAATCCACTTAAGAAAGAAGCAAAGCTCTAGGAGTGGAGGTGGATT  
TTTTTTTAAATGTACACTTTTAGTGACACTTTAATGCAAAATCTGGAGAAGCCCAT  
CCTTATGTGCATAGCACCTTTCAGTTTACAGAACACTTTTTAGGAATGATCTCATTTGTA

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9118 ACATCTGTACTTTGGCTCCATATGAACCCACCTTAAATCTGATGCATTTAAAAATATA  
ATATAGTCTTTCCCTCATTAGGAACTTCAACCACAACTGAGATATGGTGTGAAGTATA  
TTTAATATAGGCACAGTGAGCTAGTGATTTCCCTTTTGACTTTTAGTCTACAGGAAATTAG  
AGGAAGAGTTTAAATGATAAAATGGAAAGAAGCCATTCTACTGATAGCCAGTTAGGAAGTT  
TCAGTTTGGACAGCTCCCTTGGCTGATGCAGAAAGGTGGATAAAAAATGACAATCTTTTTC  
[T, A]  
GTACTCTGATTCTTATAAAGGGCACCTACTGGATGATCCAGATGAGGTTAGAGTGAGTTA  
GGGGCTTAGCTCTACATGGCATGTTTACAGAATCTACCTAACCGTGGCACTAGGAGTGTG  
GTCACCCCTGTTGGTCCACCCACCTGGGTGATTTCTCTCCATAAGAATCATGGAGGTCAA  
AGGGACCTTCCACTTCTGGGCTGGTCTAGGGGTACTCTCAGCGGAGACTTTACAGTT  
TATCTATGTCTGGCTCATTACCATCACCTACAATGGGGAAATAAAGACCTCATATTTACT

9192 CTCATTAGGAACTTCAACCACAACTGAGATATGGTGTGAAGTATATTTAATATAGGCAC  
AGTGAGCTAGTGATTTCCCTTTTGACTTTTAGTCTACAGGAAATTAGAGGAAGAGTTTAAAT  
GATAAAATGGAAAGAAGCCATTCTACTGATAGCCAGTTAGGAAGTTTTCAGTTTGGACAGC  
TCCCTTGGCTGATGCAGAAAGGTGGATAAAAAATGACAATCTTTTCTGTACTCTGATTCT  
TATAAAGGGCACCTACTGGATGATCCAGATGAGGTTAGAGTGAGTTAGGGGCTTAGCTCT  
[A, G]  
CATGGCATGTTTACAGAATCTACCTAACCGTGGCACTAGGAGTGTGGTCACCCCTGTTGGT  
TCCACCCACCTGGGTGATTTCTCTCCATAAGAATCATGGAGGTCAAAGGGACCTTCCACT  
TCTGGGGTCTGGTCTAGGGGTACTCTCAGCGGAGACTTTACAGTTTATCTATGTCTGGC  
TCATTACCATCACCTACAATGGGGAAATAAAGACCTCATATTTACTTGCTAGAACATCTA  
TTTGTCAATTTGCAGCCACAGTTTAAAGAGTTTTTTTTTCTCCCTGTGAGTGTCTAGGACT

9222 TATGGTGTGAAGTATATTTAATATAGGCACAGTGAGCTAGTGATTTCCCTTTTGACTTTTA  
GTCTACAGGAAATTAGAGGAAGAGTTTAAATGATAAAATGGAAAGAAGCCATTCTACTGAT  
AGCCAGTTAGGAAGTTTTCAGTTTGGACAGCTCCCTTGGCTGATGCAGAAAGGTGGATAAA  
AATGACAATCTTTTCTGTACTCTGATTCTTATAAAGGGCACCTACTGGATGATCCAGAT  
GAGGTTAGAGTGAGTTAGGGGCTTAGCTCTACATGGCATGTTTACAGAATCTACCTAACCC  
[G, A]  
TGGCACTAGGAGTGTGGTCACCCCTGTTGGTTCCACCCACCTGGGTGATTTCTCTCCATAA  
GAATCATGGAGGTCAAAGGGACCTTCCACTTCTGGGGTCTGGTCTAGGGGTACTCTCAG  
CGGAGACTTTACAGTTTATCTATGCTGGCTCATTACCATCACCTACAATGGGGAAATAA  
AGACCTCATATTTACTTGCTAGAACATCTATTTGTCAATTTGCAGCCACAGTTTAAAGAGTT  
TTTTTTTTTCTCCCTGTGAGTGTCTAGGACTGAGTACTCTGAATTGAAAATGAAACCTGAC

9734 TTGTCAATTTGCAGCCACAGTTTAAAGAGTTTTTTTTTTCTCCCTGTGAGTGTCTAGGACTG  
AGTACTCTGAATTGAAAATGAAACCTGACTTCCTAATCCTCCATTTAGGGTTGAAGGGAG  
GGAGTAAGGGTCATAATCACTGGCAGGGGAGGGCACGGTCATGAGGGAGCATTGCATTCTT  
TTTCTTTTGCCATTCCCAGAGCCAGGGAGATGGGGAGGGGTGGGCATTGGAGGTAGTGGG  
GATGAGGCTGGGAGATGGATGGGATTTTCAAGAGATTTTAGGTTTTGTATTACCAATAACT  
[G, T]  
CTAGTCTCATCACTTACCCTTTCCATGGAAGTAACCTTTGAAGCAGAGTGGAATGGTGGGG  
AAACAAGATTAGAAAGGAAAACATAGGATTTACTGCCATACATAAGCCAGGTGATCACAG  
GGAACCTTTTCTTCACTTCTCCCGTCTTCTTTTCTTCACTTCCCTTGTTCCTCCCCACC  
GCCATCCCCCAAATCCTGCAGAGTCTTGATCTCAATTGCTCTCGCTTGTGCAAAGGGTCT  
CTTCTCCCTTACTCAACTACCCAGTGTGGTGGGGCTGGTGGTATTTACAGTTTAAAAAG

9795 GTACTCTGAATTGAAAATGAAACCTGACTTCCTAATCCTCCATTTAGGGTTGAAGGGAGG  
GAGTAAGGGTCATAATCACTGGCAGGGGAGGGCACGGTCATGAGGGAGCATTGCATTCTT  
TTCCTTTGCCATTCCCAGAGCCAGGGAGATGGGGAGGGGTGGGCATTGGAGGTAGTGGGG  
ATGAGGCTGGGAGATGGATGGGATTTCAAGAGATTTTAGGTTTTGTATTACCAATAACTG  
CTAGTCTCATCACTTACCCTTTCCATGGAAGTAACCTTTGAAGCAGAGTGGAATGGTGGGG  
[A, G]  
AACAAAGATTAGAAAGGAAAACATAGGATTTACTGCCATACATAAGCCAGGTGATCACAGG  
GAACCTTTTCTTCACTTCCCTCCGTCCTTCTTTTCTTCACTTCCCTTGTTCCTCCCCACCG  
CCATCCCCCAAATCCTGCAGAGTCTTGATCTCAATTGCTCTCGCTTGTGCAAAGGGTCC  
TTTCTCCCTTACTCAACTACCCAGTGTGGTGGGGCTGGTGGTATTTACAGTTTAAAAAGA  
GTTGCTTGAATAGAAAATGAAAATTTGGTCGGGTGATGGAGAGCCTGGAAGTCACGGTAA

9853 GGGAGTAAGGGTCATAATCACTGGCAGGGGAGGGCACGGTCATGAGGGAGCATTGCATTCT  
TTTTCTTTTGCCATTCCCAGAGCCAGGGAGATGGGGAGGGGTGGGCATTGGAGGTAGTGG  
GGATGAGGCTGGGAGATGGATGGGATTTTCAAGAGATTTTAGGTTTTGTATTACCAATAAC

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TGCTAGTCTCATCACTTACCCTTTCCATGGAAGTAACTTTGAAGCAGAGTGAATGGTGG  
GGAAACAAGATTAGAAAGGAAAACATAGGATTTACTGCCATACATAAGCCAGGTGATCAC  
[A, C]

GGGAACCTTTTCCCTTCATTCTCCCGTCTTCTTTTCTTCATTCCCTTGTTCCCTCCCCAC  
CGCCATCCCCCAAATCCTGCAGAGTCTTGATCTCAATTGCTCTCGCTTGTCAGAAAGGGT  
CCTTTCTCCCTTACTCAACTACCCAGTGTGGTGGGGCTGGTGGTATTTACAGTTTAAAAA  
GAGTTGCTTGAATAGAAAATGAAAATTTGGTCGGGTGATGGAGAGCCTGGAAGTCACGGT  
AACCTTTGCAGACGCCTAAAACACCAATATTTCATAATTTTGACATGCAAGCTAGCAACAA

10397 CTTTGCAGACGCCTAAAACACCAATATTTCATAATTTTGACATGCAAGCTAGCAACAAATTT  
TACTACCAAGAAAATGAGTTTCTTATGTGCAAGCAGAACTCGAGATCCCTTAAATAATCA  
CACACCAAAATATTTAGCATGATAAAGATAAATAGTATAGCTTACTAAATTTAATGTGATA  
TGAGCCTGACAGGCAGAATAGAGATGCTTGATATTAGGTGTGATAAAGGTTTGACATCC  
AACATTTCACTTACTTCGTCTCTGAGACAAAAGTCAGGCACCAAGTGTTTAAGAAAAATT  
[G, A]

ATGGGAGGAAAAGCTTAGAGATGAATAAAGTCTATTATTATTAATTTATATTTTCTCTGAG  
AACTGGGGAGTGTTGTACCCTAGTTAACTGTGGACTAACCTGGGCCAGCTCCTGGATTTC  
TACTGGCTAAGAATGTTGCTTTAGGCCAAAGGAATTTATCCCTCATGGTGGAATTTGAGG  
CCATATGGGAGGTGATTATGATAGATCTGTTTCGGCTCTACATTCTTACAATAACCTGA  
AAGGAGATTAAATACATGTTATAGTCATTTAACCTAGACTCCAGGCAAAATGTCACCCTC

11198 TCTTCATCTGCAAGATAGGGATAATTACAGCCATTACTTCTTTGGTTTGTATGTGGATT  
ACATAAAGTGATACATGCAAGCTCTTAGAAGAATGCCGATCATCATGAAGGCTCCATG  
AGTGGTACCTGCCTTGTGCTGTTCTCACAGTTGCAGGAGGCAGCCTGTGAAGTCAGGGTA  
GCCTCCAGCTCAGCCTCTTGGAAGCATCTGGTTCAGTGTCTGGATCATCCAGGAAGTGGT  
CCATAGCAGAGCACAAACCTCCTGATACTCTGGAAGACTCTTAGTATTCTTAGTTCAGAT  
[G, T]

TAAACAACCTAGGCTGTCTGGTTAACTCAGAGAAAAGACCAGTGAAAGAACATGGCTTG  
GAATCACAATATTTGAGTCTGAGTTAATGTACCCATTTTATTAGCAGTGTATCATAGTTG  
ATTTCCGGCTGCTTTAATAAAAATTCCATAAACTAGATAGATTATAGACAACAGAAAATTTAT  
TTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATCAAGGCACCTGGTAGATTTGGCATCTG  
GTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCTTCTTGCTGTGCTTACACGGTAGA

11470 GAAGACTCTTAGTATTCTTAGTTCAGATGTAAACAACCTAGGCTGTCTGGTTAACTCAG  
AGAAAAGACCAGTGAAAGAACATGGCTTGAATCACAATATTTGAGTCTGAGTTAATGTA  
CCCATTTTATTAGCAGTGTATCATAGTTGATTTCGGCTGCTTTAATAAAAATTCCATAAAC  
TAGATAGATTATAGACAACAGAAAATTTATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAA  
GATCAAGGCACCTGGTAGATTTGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATGGT  
[G, T]

CCTTCTTGCTGTGTCCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTTTGA  
TAACTGCACGAATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAAAGG  
CCCCATCTCCTAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTCTGGGGGG  
ACACATTCAGACCAATAACACTGTGTGAACCTGGCCAGTCACCTAACCTTTCTAGCAATT  
AGTTTTCTTTTGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGA

11534 AAGACCAGTGAAAGAACATGGCTTGAATCACAATATTTGAGTCTGAGTTAATGTACCCA  
TTTTATTAGCAGTGTATCATAGTTGATTTCCGGCTGCTTTAATAAAAATTCCATAAACTAGA  
TAGATTATAGACAACAGAAAATTTATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATC  
AAGGCACCTGGTAGATTTGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCT  
TCTTGCTGTGTCCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTTTGATAA  
[G, C]

TGCACGAATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAAAGGCCCC  
ATCTCCTAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTCTGGGGGGACAC  
ATTGAGACCATAACTGTGTGAACCTGGCCAAGTCACCTAACCTTTCTAGCATTAGTT  
TTCTTTTGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGATCAA  
ATGAGACAAATGTGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTCCAAAAA

11540 AGTGAAAGAACATGGCTTGAATCACAATATTTGAGTCTGAGTTAATGTACCCATTTTAT  
TAGCAGTGTATCATAGTTGATTTCCGGCTGCTTTAATAAAAATTCCATAAACTAGATAGATT  
ATAGACAACAGAAAATTTATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATCAAGGCA  
CTGGTAGATTTGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCTTCTTGC  
TGTGTCCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTTTGATAACTGCAC  
[T, G]

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AATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAAAGGCCCATCTCC  
TAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTTCTGGGGGACACATTGAG  
ACCATAAACACTGTGTGAACCTTGGCCAAGTCACCTAACCTTTCTAGCATTAGTTTTCTTT  
TGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGATCAAATGAGA  
CAAATGTGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTCCCAAATGTGTT

11557 TGGAAATCACAATATTTGAGTCTGAGTTAATGTACCCATTTTATTAGCAGTGTATCATAGT  
TGATTTTCGGCTGCTTTAATAAAATTCATAAACTAGATAGATTATAGACAACAGAAATTT  
ATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATCAAGGCACTGGTAGATTTGGCATC  
TGGTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCTTCTTGCTGTCTCTTACACGGTA  
GAAAAAGTGATGGGTCTTTCTGGGCTTCTTTGATAACTGCACGAATCCTAATCATGAAG  
[C, G]  
CTCCATGCCCATGACCTAATTACCTTCCAAAGGCCCATCTCCTAATAACATTACCTTTG  
GGTTAGGATTTCAACATATGAATTTCTGGGGGACACATTGAGACCATAACACTGTGTGA  
ACTTGGCCAAGTCACCTAACCTTTCTAGCATTAGTTTTCTTTGGGTAAAATAAAGATC  
ACAATAACAACCACTTCACAGTTGCTGAGATGATCAAATGAGACAAATGTGAATAAACTT  
CATAACTGTTAAATTCAGACCAACATTTCCCAAATGTGTTCTGTGAGACATAAGCTA

11708 AAGATCAAGGCACTGGTAGATTTGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATG  
GTGCCTTCTTGCTGTGTCTTACACGGTAGAAAAAGTGATGGGTCTTCTTGGGCTTCTT  
TGATAACTGCACGAATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAA  
AGGCCCATCTCCTAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTTCTGGG  
GGGACACATTGAGACCATAACACTGTGTGAACCTGGCCAAGTCACCTAACCTTTCTAGC  
[A, C]  
TTAGTTTTCTTTGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGAT  
GATCAAATGAGACAAATGTGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTTC  
CCAAAATGTGTTCTGTGAGACATAAGCTAGACTCATCAGATACTCTGAGAAGAAAAGTGG  
TGTCATGGTAAAGTCAGTTTGCAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATCA  
TGCACGTTAGCATGTTACTGTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTTA

11953 ACATTGAGACCATAACACTGTGTGAACCTTGGCCAAGTCACCTAACCTTTCTAGCATTAG  
TTTTCTTTTGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGATC  
AAATGAGACAAATGTGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTCCCAA  
AATGTGTTCTGTGAGACATAAGCTAGACTCATCAGATACTCTGAGAAGAAAAGTGGTGTC  
ATGGTAAAGTCAGTTTGCAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATCATGCA  
[C, T]  
GTTAGCATGTTACTGTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTTAAATCA  
ATATAAACATTTATTATCTCATAAGTTCTGTGGATCAATAATTCAGGGATAGTTTAATTG  
GGTGGTCTGACTAGGAGTCTGTCTATTGATTGTGGTCAGATGTTGTCCGGGCTGCTGTCT  
CTGATGGCTTGACTGGGGCAGGAGGATCTGTTTCCAAGATGGTGTGCTCATGTGGCTTGC  
AAATGTGCTGCTGGTTGTTGGGGAGAGGGCTCATTTCTGCCAATGTGGGCCTGTCCATGG

11967 ACACGTGTGAACCTTGGCCAAGTCACCTAACCTTTCTAGCATTAGTTTTCTTTTGGGTA  
AAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGATCAAATGAGACAAATG  
TGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTCCCAAATGTGTTCTGTGA  
GACATAAGCTAGACTCATCAGATACTCTGAGAAGAAAAGTGGTGTGATGGTAAAGTCAGT  
TTGCAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATCATGCACGTTAGCATGTTAC  
[T, C]  
GTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTTAAATCAATATAAACATTTAT  
TATCTCATAAGTTCTGTGGATCAATAATTCAGGGATAGTTTAATTGGGTGGTCTGACTAG  
GAGTCTGTCTATTGATTGTGGTCAGATGTTGTCCGGGCTGCTGTCTGATGGCTTGACT  
GGGGCAGGAGGATCTGTTTCCAAGATGGTGTGCTCATGTGGCTTGCAAATTGCTGCTGGT  
TGTTGGGGAGAGGGCTCATTTCTGCCAATGTGGGCTGTCCATGGGATGCTTATGTGTA

12172 TCTGAGAAGAAAAGTGGTGTGATGGTAAAGTCAGTTTGCAGGATGATACGTGCTCAGTCA  
TTCTAGAGAGTCATGACGTTAGCATGTTACTGTATTATTGTGTAACAAATAACCC  
CAACATTTAGTGGCTTAAATCAATATAAACATTTATTATCTCATAAGTTCTGTGGATCAA  
TAATTCAGGGATAGTTTAATTGGGTGGTCTGACTAGGAGTCTGTCTATTGATTGTGGTCAG  
ATGTTGTCCGGGCTGCTGTCTGATGGCTTGACTGGGGCAGGAGGATCTGTTTCCAAG  
[A, C]  
TGGTGTGCTCATGTGGCTTGCAAATTGCTGCTGGTTGTTGGGGAGAGGGCTCATTTCTGT  
CCAATGTGGGCTGTCCATGGGATGCTTATGTGTACTCATATGTGACATGGTGGCTGGCT  
TCCCAAGAACAAGTGATTCAAGAGAGAACAAGGTGGAATTGGCAACACTTTTTATGACT

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TAACTTCAAAAATCACATATTGTTACCACCACCACGTTCTTTTCATTAGACGCCAGTCAC  
TAAAGTTAGTCCACATCTGGGGAGTGGTGGGGTGATCACATTCACGTTGGAAGGGAGAC

12188 GTGTCATGGTAAAGTCAGTTTGCAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATC  
ATGCACGTTAGCATGTTACTGTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTT  
AAATCAATATAAACATTTATTATCTCATAAGTTCTGTGGATCAATAATTCAGGGATAGTT  
TAATTGGGTGGTCTGACTAGGAGTCTGTCAATTGATTGTGGTCAGATGTTGTCCGGCTGC  
TGTCATCTGATGGCTTGACTGGGGCAGGAGGATCTGTTTCCAAGATGGTGTGCTCATGTG  
[G, A]  
CTTGCAAAATTGCTGCTGTTGTTGGGGAGAGGGCTCATTTCCTGCCAATGTGGGCCTGTG  
CATGGGATGCTTATGTGTACTCATATGTGACATGGTGGCTGGCTTCCCCAAGAACAAGTG  
ATTCAAGAGAGAACAAGGTGGAATTGGCAACACTTTTTATGACTTAACTTCAAAAATCAC  
ATATTGTTACCACCACCACGTTCTTTTCATTAGACGCCAGTCACTAAAGTTAGTCCACAT  
CTGGGGAGTGGTGGGGTGATCACATTCACGTTGGAAGGGAGACATGTCAAAGAATTGGA

13472 GTCCCTTCTTTTACAGATTCACTGACTGACAACCTAACTTTCTTGGGTAAAGCCAGAAAA  
AACAGGATGGCCTCCAGGCCGAGCAGTAGAAATGCTGGGAATGGGGTGTCTGGTGTGTG  
TCTGGTGTGTTCTCTGCAGTGCCTGCAGGCCATGTGTCTGTATGGTGACTGAAACGCAAGT  
CGGCATCCAGCCAGGATGGCAGGGACCGTGTGCCTGGGGTGACGGCAAACACACAGTGA  
GAAGCTGCTGATGGAGGGAGGACCGTTAGCACTCCTTGTCTATTTTGTAGTAAACATTTT  
[-, T]  
TTACAATCTTGTGTCTTTTTCTGTACAGTCTTGAGAAAATGATTTCCAGGAAGCAGGATG  
CATCCAATGACTTAGAGGTTCCCATGTTTCCAAACATTACATGCCTGGCTTATTCCTGAG  
GCAGTTTTGTATCTGAAGGAAGTTTGGAGCTTCTGTGTTCTGGGCAGAGGCGAGTGAA  
TATGGTTTTCTTTGAGTAGCACCGTGGACTTGAGAATGATCAGGAGCTGGACATTGTTGA  
ATATGTCACCTACTGCACAAAATGGCAAAGACAGGGTCTGGGACAGGGTGAGAGTGTGTT

13781 TTGTTGCTTTTTCTGTACAGTCTTGAGAAAATGATTTCCAGGAAGCAGGATGCATCCAAT  
GACTTAGAGGTTCCCATGTTTCCAAACATTACATGCCTGGCTTATTCCTGAGGCAGTTTT  
GTATTCTGAAGGAAGTTTGGAGCTTCTGTGTTCTGGGCAGAGGCGAGTGAATATGGTTT  
CTTTTGTAGTAGCACCGTGGACTTGAGAATGATCAGGAGCTGGACATTGTTGAATATGTCA  
CTTACTGCACAAAATGGCAAAGACAGGGTCTGGGACAGGGTGAGAGTGTGTTGAATGGAG  
[A, C]  
TGCTTGGGGCCCCAGTCACATTCAGGAGCCAGCACTGATGGCATCTGTAACCATAGTAAC  
CAAGAGTGAAAAAGTCTCAGGATGCCAAGACGCCACTGTGCCCCCTTCTGGTTCTGTT  
GTTTTCCCCTTATTCTTTTCCATCCAGAAATCCCCCATCCCTGCCCCCAACCACCTGAC  
AAGGGACTGACTTTTCAGGGTGGTTTCTACACTGGTGATTTTAACTTCTACTAACTCAAC  
ACTTCTGTAGCCCCTTTTTTCAGTTCTGAGATCCACAAGGATTCATTATGATCCAGACTA

14031 AAAATGGCAAAGACAGGGTCTGGGACAGGGTGAGAGTGTGTTGAATGGAGATGCCTGGGG  
CCCCAGTCACATTCAGGAGCCAGCACTGATGGCATCTGTAACCATAGTAACCAAGAGTGG  
AAAAAGTCTCAGGATGCCAAGACGCCACTGTGCCCCCTTCTGGTTCTGTTGTTTTCCCC  
TCTATTCTTTTCAATCCAGAAATCCCCCATCCCTGCCCCCAACCACCTGACAAGGGACTG  
ACTTTCAGGGTGGTTTCTACACTGGTGATTTTAACTTCTACTAACTCAACACTTCTCTGT  
[A, G]  
GCCCTTTTTTCAGTTCTGAGATCCACAAGGATTCATTATGATCCAGACTAAGCCTCATGC  
ACCTAATTTCTTCCGCTTTTCCATTTTACTGTGAAAATTGGTCTTAAGTCTGTAGTAT  
ACATACTCTAGACTTATTTACAGCTGGGCATAACAACGGTGGCTCATGGCACTCAAAGTT  
TCCAGTAACACTCCTGCACTCACAGTCTGGTATAGATCATGAGATTTTTTTAGATGTGTT  
TTAAATGAACAGAGAAAGGCAATGAGGCACAGGAAAGAGAGCCGTGGTCTCTTGTTTGGA

14110 CCAGCACTGATGGCATCTGTAACCATAGTAACCAAGAGTGAAAAAGTCTCAGGATGCCA  
AGACGCCACTGTGCCCCCTTCTGGTTCTGTTGTTTCCCCTCTATTCTTTCATCCAGAA  
ATTCCCCCATCCCTGCCCCCAACCACCTGACAAGGGACTGACTTTCAGGGTGGTTTCTA  
CACTGGTGATTTTAACTTCTTACTAACTCAACACTTCTGTAGCCCCTTTTTCAGTTCTG  
AGATCCACAAGGATTCATTATGATCCAGACTAAGCCTCATGCACCTAATTTCTTCCGCTT  
[T, C]  
TCCATTTTTTACTGTGAAAATTGGTCTTAAGTCTGTAGTATACATACTCTAGACTTATTT  
ACAGCTGGGCATAACAACGGTGGCTCATGGCACTCAAAGTTTCCAGTAACACTCCTGCAC  
TCACAGTCTGGTATAGATCATGAGATTTTTTTAGATGTGTTTTAAATGAACAGAGAAAGG  
CAATGAGGCACAGGAAAGAGAGCCGTGGTCTCTTGTGAGATGTGGGTTTTGCTACTG  
GTTGGAAAGTGAGGTGTGGCATGGCGCATGAGGGTGGGGAGAGGTGGGTGATGCTCAGGT

FIGURE 3, page 56 of 107

14248 CCAACCACCTTGACAAGGGACTGACTTTTCAGGGTGGTTTCTACACTGGTGATTTTAACTT  
CCTACTAACTCAACACTTCCTGTAGCCCCCTTTTTCAGTTCTGAGATCCACAAGGATTCAT  
TATGATCCAGACTAAGCCTCATGCACCTAATTTCTCCGCTTTTCCATTTTACTGTGAA  
AATTGGTCCTAAGTCCTGTAGTATACATACTCTAGACTTATTTACAGCTGGGCATAACAA  
CGGTGGCTCATGGCACTCAAAGTTCCAGTAACACTCCTGCACTCACAGTCTGGTATAGA  
[A, G, T]  
CATGAGATTTTTTTAGATGTGTTTTAAATGAACAGAGAAAGGCAATGAGGCACAGGAAAG  
AGAGCCGTGGTCTCTTGTGTTGGAGATGTGGGTTTTGCTACTGGTTGAAAAGTGAGGTGTG  
GCATGGCGCATGAGGGTGGGGAGAGGTGGGTGATGCTCAGGTCATGTAGGGCATAGTAGG  
TCTTACTTACTAAGGAACCTTTTTTTCTGAGAATAACAGGAATGTCTTGATTGATTGA  
AGTGGGAGGATGACACAATCAGATTTTAAAAGATTATTTAAATCGCTAATAAATCAAAT

14676 GCATGAGGGTGGGGAGAGGTGGGTGATGCTCAGGTCATGTAGGGCATAGTAGGTCTTACT  
TACTAAGGAACCTTTTTTTCTGAGAATAACAGGAATGTCTTGATTGATTGAAAGTGGGA  
GGATGACACAATCAGATTTTTTAAAGATTATTTAAATCGCTAATAAATCAAATGATGGGT  
TCAGCGAATGTTTGCAGAGGATACTTACTGTGTGACAGGCATAGTGTGGCCTTACCTGG  
GGTATCTGTGTATTCTTGTAGGAATCCTACATAAAAGCTGTTAAATATTTTAAACAGAAA  
[T, C, A]  
AAGCTTTTCTTGACATCTTTGAATTATGACAACCAATTCCAACTTCTGGTTGCAAATGG  
GAGGTGTATCTTAAAGCAATGGCGATTGCATTTTCAATTTCTGTTCATTAAATGATATT  
TTCCCTGGCTTTGTACATGACCCCTGATTCTGTGATAATTTGCATATCTAGAGTCGATG  
AATCAATACATGCAAACTGTGGTGGCTCGCTCATATTCTGTTATACTTCAGACGCCTT  
TTGGAAGCATGTGGCTCTCAGTTCAGCATAATGCTCCTGATAAAATTGCCCCCTCCATAC

14981 TTTTCTTGACATCTTTGAATTATGACAACCAATTCCAACTTCTGGTTGCAAATGGGAGG  
TGTATCTTAAAGCAATGGCGATTGCATTTTCAATTTCTGTTCATTAAATGATATTTTCC  
CTGGCTTTGTGTACATGACCCTTGATTCTGTGATAATTGCATATCTAGAGTCGATGAATC  
AATACATGCAAACTGTGGTGGCTCGCTCATATTCTGTTATACTTCAGACGCCTTTTGG  
AAGCATGTGGCTCTCAGTTCAGCATAATGCTCCTGATAAAATTGCCCCCTCCATACCCGC  
[C, T]  
GTCACTTTGTTTCTGGTGTGTCCAGAGGTATTGTAACATTGGGGTATTTCTCCTTTGACT  
CTAATGGGACCCCTGCTAGTTGTGTTCTTGTGGCCTCAGCTTGGGAAGGCCTCCCAAAAG  
CCTGAATTAATGAAAGCTTCTGATGTGCCGATCCCTTCTCTGGCAGGGTGAACGCAG  
TTTTCTATAGGAGCGTGAATGCCTGTGCTCAGGCAATAATCTCTGCATTACAGCCTCAGTA  
CTAAAGACAGGCAGAGCAGACAGCCACAGGGGGTGGGATTGAGGAGCCCTATAAAGTCC

16365 CAAAAAGAGGACAAAGCATATCTATGAACCCGTAATGCTAACCTTCATTATTCAACAGTG  
ATGCTTATGGCAATGCCAACGGGTGTGGGGCCTTTTATTAATTTTAAATTTAGTTTTT  
TATGTTTTTGGAGACAAGATCTTGATTGTGCCCCGAGCTGGAGTGCAGCGGTGCAATCAC  
AGCTCACTGCAGCCTCGATCTCCTGGGCTCAATCAATCCTCCACCTCAGCCTCCTGAGT  
AGCTGGGACTATAGGCATGTGCCCCAGACTTGGCAAATTTATGCATTTTTTGTAGAGAC  
[A, G]  
GGATTTTGCCATGTTGCCAGGCTGGTCTCGAACTCCTGAGCTCAAGCAATCCGCCTACC  
TTGGCTTCCCAAGTGCTGGAATTACTGGTGTGAGCCACCGTGCCCTGCCTGCTTGAGCC  
TTTTTGCTATTCTCCCTCCTATGGGAAAAAGAATCGAGAAAGAGCAGTAGGCTCTACTAG  
AGTCTGGAGCATATCGGTTCTGAGATTTAGATTAAATTTCTCTATGTCTGCAGCAAGTAC  
AAATGTGAGTGTATATTCAGCCTCTTGAAGAAGACATCTATCCATTTCTTCAGTGAATAT

16827 GAGCAGTAGGCTCTACTAGAGTCTGGAGCATATCGGTTCTGAGATTTAGATTAAATTTCT  
CTATGTCTGCAGCAAGTACAAATGTGAGTGATATTCAGCCTCTTGAAGAAGACATCTAT  
CCATTTCTTCAGTGAATATTTGCCCGGAGTCTTCTTCGTGACAGGCACTGTTGTAGGCC  
TGGAGGTACAGCAATAAACAAGACGAAGTCTCTGCCCTCCTGAACTAACCGTTTAGCCA  
AGGCTTAGCATCTCTCACTCAGGTCAACTTCTGCATTTTAGAAATCTGTTTCAGGCAC  
[G, A]  
CATTTGACAAGTAAAGAGGTTCCAAAAATACATTAATAAGGATGAAATGAGGCCATTCT  
GATATTCATTGCTTGGCAAAATGCTTAATATGGGAATTTAATATGGAATGGGTGCTGA  
TGCTGTCAAAGGTGGTGACATTTCTGTAGAAAATTCAGTGATTTCAAAGAAGGCCTCAGA  
GCTGCCTAGTTTGAATTAGATATTTGAAGAATCTGTGTTAATTAGGACTCTGTGGCTT  
GTGCATGTATACTGGGACGAGACTGGAGTTTGTGTCTCTCCCATGATGATGGCATGTAAA

17599 TGTCTTTTGTAGTAGGAGGAAATTAGGACTTTTGTCTGTTATATGCCTTGCACTCTCTGG  
CCTTCTCTGGGCTGCTGGGGCAGAATGAGGCCAACAGAGAACCACGGATGCCAGTCTGGG  
TCACAAGGGCTTAAGGAAGCAGCAGATGTTGGACTGACTGGGGTGTCCATTAAGAATCC

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AGGGGTAGTGAGAGTCTTACCTGGAGTTTGAGGCCGCACTTCCATTGCCAGGACTCTCAG  
CTGAGTGGCTGGAAGAGACCTGTAGGAGCCATCCTTCCAGTATCTATCAGAGGTTTCTGC  
[A, T]

CTGTTTAAAGCTCGTCTAGTGATCGAGGGAACCTTGACTGGGGGTGCTGATGATTATTA  
ACAGTGGCCATACTCCCACGGCTGCAGGTGGAGATGAAGTGTGTTGATGAGAAGATGAGCA  
AGAGCTCAGGTGTGCCCCACCAGCTCTGCCACTCCCAAGCTGCCGAACCTAGGCACTAAC  
TTACCTCTCTGTGTCTGCTTCCCAACTTGAGAACCGGAAATGATAAAAGTACCTGCTCCC  
TAGGGAGTAGGTATGGTTAAATGAGACCTCTTAAATGAGACCATGCACACGAAGAGCAGA

18093 TCTGCTTCCCAACTTGAGAACCGGAAATGATAAAAGTACCTGCTCCCTAGGGAGTAGGTA  
TGGTTAAATGAGACCTCTTAAATGAGACCATGCACACGAAGAGCAGAGCACAGTGCCTGG  
CACACAGGAGGCACCTAATAAACATCAATGATGCTGCTGCTGGTAACACCCATTTGCTGA  
GGGTCTTCAGTGGCTCAGGCACAGTACTCAGTGTAAACATATAATATGTAATTTATCT  
TCACAGTAGCCTGAGTCACTTGCTTGTCTCTGTTAATATCCTAATGTTTAGCTCACC  
[A, G]

ACTTAGATGCTCATGACTTCCAAAGGATCTTCATGTAACAAGGACTCCATATCTATTTTT  
AAAAAATAAGAGCTTTATTAAGATATAATTTACATACCATAAAATTACCTATTTAAATG  
TACAATTCACTGGTGTGTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTAATT  
GTAGAAAATTTTCATGACTCCAAAAAGAACTCCATATCCATTAGCAGTCACTCCCCATT  
TTATCTCTCCAGTCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCCTAT

18226 CCTAATAAACATCAATGATGCTGCTGCTGGTAACACCCATTTGCTGAGGGTCTTCAGTGG  
CTCAGGCACAGTACTCAGTGTCTTAACATATAATATGTAATTTATTTCTCACAGTAGCCTG  
AGTCACTTGCTTGTCTTCTGTTAATATCCTAATGTTTAGCTCACCAACTTAGATGCTC  
ATGACTTCCAAAGGATCTTCATGTAACAAGGACTCCATATCTATTTTAAAAAATAAGAG  
CTTTATTAAGATATAATTTACATACCATAAAATTACCTATTTAAATGTACAATTCAGTG  
[G, C]

TTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTAATTGTAGAAAATTTTC  
ATGACTCCAAAAAGAACTCCATATCCATTAGCAGTCACTCCCCATTTATCTCTCCAG  
TCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCCTATTTTGGGCATTTCA  
TGTAATGGCATCATACAACAGGTAGATATTTGTGTGTGTGTGTGTGTGTGTGTGTGT  
GTGTGTGATCAGCTTCTTTCACGTAACATAATGCTTTCAGGGTTCACTCATGTGGCATC

18467 TTTATTAAGATATAATTTACATACCATAAAATTACCTATTTAAATGTACAATTCAGTGG  
TTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTAATTGTAGAAAATTTTC  
ATGACTCCAAAAAGAACTCCATATCCATTAGCAGTCACTCCCCATTTATCTCTCCAG  
TCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCCTATTTTGGGCATTTCA  
TGTAATGGCATCATACAACAGGTAGATATTTGTGTGTGTGTGTGTGTGTGTGTGTGT  
[-, T, G]

TGTGTGATCAGCTTCTTTCACGTAACATAATGCTTTCAGGGTTCACTCATGTGGCATCC  
ATACCTATTTTGAATGAAGAATGAAGACAGTCATCTGAGACAGTTGTATTAGTCCATTTG  
GAAGATGAGGAACTGAGGCTGAGAGTGTGTATGTAATTTGCTCATGGCCACCCATCTG  
AAAGCGCTTGAGCTGGGATTTGCTGCTCAGGTCCATCTGGCTCCAAGGCAAGACCTTGCC  
CTTCTCATCCACTCACTGGTCTCTGGTTGGACCTCTGCATCATGCTGAACACCATTTCTA

18511 ATGTACAATTCAGTGGTTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTA  
ATTGTAGAAAATTTTCATGACTCCAAAAAGAACTCCATATCCATTAGCAGTCACTCCCC  
ATTTTATCTCTCCAGTCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCC  
TATTTTGGGCATTTTCATGTAATGGCATCATACAACAGGTAGATATTTGTGTGTGTGTGT  
GTGTGTGTGTGTGTGTGTGTGTGATCAGCTTCTTTCACGTAACATAATGCTTTCAGGGT  
[-, A, T]

CACTCATGTGGCATCCATACCTATTTTGAATGAAGAATGAAGACAGTCATCTGAGACAGT  
TGTATTAGTCCATTTGGAAGATGAGGAACTGAGGCTGAGAGTGTGTATGTAATTTGCTC  
ATGGCCACCCATCTTGAAAGCGCTTGAGCTGGGATTTGTGCTCAGGTCCATCTTGGCTCC  
AAGGCAAGACCTTGGCCTTCTCATCCACTCACTGGTCTCTGGTTGGACCTCTGCATCATG  
CTGAACACCATTTCTATAGAGATGGGTGTGTCCCACTGGGTGTGGACATCCTGAGGAATT

19107 GAATTGCTGTGGTTGCAAGAACTCTGATATTTCCATCTACCTTGAGGGGGATATGGTTT  
CATGTCTGTATACTCACATAGTGTGACCAGTCTAATCTTTTGTCCATTTCTTAAGGGT  
TATGATATGAACCTTGAAAGTTACAGAAATGAAAGTGATAGGAGAGATATACTTTCTGGG  
TTGGAAACCCAGCAACCAGTCACTCAATATGATGGAGGAAATGTATCCTTCTTGTGTGTG  
TCTTCAATAATAGATTGTAATGAAACACTATGGTGTCTTAGTTGGCTCCCCCTCTGCCCC  
[G, A]

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TGCCCCCTCCCCAGCCCCAGTGCTTTTCTGGAGACATGAGATGGTGTATCCCTTCCTCA  
 GTTGCTGTGATAGCAGTGGGGATGATGGGGACAGGTATTCATGGAAGGAAAAGGCATGGT  
 ACCAGCAGGCTCTTGGGCAGGGATGTGTGCTTCACTTGATCATCAGGGAATGAGCTATC  
 ATGATGACAGAGCACATCCTATGAAGTACAAATCTTCCCCACATTTCGCCAAAATTACT  
 TTTGTCTGCTCTGTTCTCTCACATGCTATTCTAGGGAAAAGGTCCCATTTTATCATTA

19223 GGGTTATGATATGAACCTTGAAAGTTACAGAAATGAAAGTGATAGGAGAGATATACTTTC  
 TGGGTTGGAACCCAGCAACCAGTCACTCAATATGATGGAGGAAATGTCATCCTTCTTGT  
 GTTGTCTTCAATAATAGATTGTAATGAAACACTATGGTGTCTTAGTTGGCTCCCCCTCTG  
 CCCCGTCCCCCTCCCCAGCCCCAGTGCTTTTCTGGAGACATGAGATGGTGTATCCCTT  
 CCTCAGTTGCTGTGATAGCAGTGGGGATGATGGGGACAGGTATTCATGGAAGGAAAAGGC  
 [A, G]  
 TGGTACCAGCAGGCTCTTGGGCAGGGATGTGTGCTTCACTTGATCATCAGGGAATGAGC  
 TATCATGATGACAGAGCACATCCTATGAAGTACAAATCTTCCCCACATTTCGCCAAAAT  
 TACTTTTGTCTGCTCTGTTCTCTCACATGCTATTCTAGGGAAAAGGTCCCATTTTATCA  
 TTAAGATGCAATGAGATTTCCATCTTGCTTCTACCAAGAAGGAGGAAAATAACCTATA  
 TAAACACCATGAAACCTTACTTTGACTTAAAC TAGTGGAATTTGGCCCCGTAATCAGAT

20102 TGGAAGGCAGGAAGTGTGGGGAATTAGTGGACCCAGGAGGCCCTCAACCAATAACT  
 GATGGAAGATGGTGCCTAAACACCCCAATTCCTCAGCCTTGGGTAGGGTAAC CAGGAA  
 TATGGTTTACATGGGGTCCCAGTTTCTCTGTAGGAAAAATTCCACTGGGCGACAGCAGT  
 AGCTAGTTAGAACTTCACTTTTATTGGTTTTCTTGGCTGCCTTCCCAGCCCTTTCTCT  
 TTTCTCTAATTCCTACTGGCGATTCTTCACTTCCCAAACAACCACTTGTGCTCAAA  
 [T, C]  
 GTAATTGTAGGATCAGCTTCTGGGGAAACCAATGAAGACATATGGTAAAGCTTCCCTC  
 TTTTCTTGCTTTTCTGCCTTTTGGCCCAATCAGTTAGCTTTGATGGTGGGAGTGAGGGGA  
 TGCTCAACCTCTCAGGCAGGCTAATGGCTCTCAGGAGACACAATCCACAGCTGATTGGCA  
 GTTTTCTCCCCAAGATATCTTCAGAACAAACCTGGTGCTGGTGAGTGATCCATGCAGCA  
 TGAAGAGAGAGGGTGAAGCTTGATGAGGCATGTTCCAGTCTCATCAAACTATTTTGTTC

21946 TTTTGTGGAGACGGCCTCCCTATGTTGCCAGGCTGGTCTCCAACCTCTGTTTTCAAG  
 CCATCCCCCTTCTCACTCTCCCAAAGTACAATTTAGTATATTTATTAACGTGTGTTC  
 GGCTTTTTGATTGCTATTGAGATGCTAATGAGATGGTCCCTGTCTATTAAAGAGCGTCCAT  
 TCTGGTGGCACAAGGAACCTCAAATATGACACAAGACAGAATACCTACTCCAGAAGAGAG  
 TTCTGTGAAAGCGTGAAGGAGGGACTTGAGTGTGCGATTGAGGAAGGACTTCACATTGGA  
 [G, T]  
 GGAGTTTTTTTTAGATAGGTCTTGAGAAACATTTTACATTTTGAACACCTCATACATCATT  
 GATAAAAAAAGAAGCAATTGGTCGAAACAACCTTCATTTCCCAGATCAAGTCTTCTAGG  
 TTACCTGCATCTGCACCCACCAGTCCCACCTTGATTCTCTCTAGATGAAGGGCGTCTTT  
 TCCTACCTAAGGCCGTCCCTTCTGCTTATGCTGGGGACTCCTTTGCTCTTTGGGGCATCC  
 TCTCTTCTCTGGGAATTGATCTCTCCCTCTCTACTTGAATATTCCTACTAGTGTATAC

22240 ATTGAGGGAGTTTTTTTTAGATAGGTCTTGAGAAACATTTTACATTTTGAACACCTCATA  
 CATCATGATAAAAAAAGAAGCAATTGGTCGAAACAACCTTCATTTCCCAGATCAAGTC  
 TTCTAGGTTACCTGCATCTGCACCCACCAGTCCCACCTTGATTCTCTCTAGATGAAGGG  
 CGTCTTTTCTACCTAAGGCCGTCCCTTCTGCTTATGCTGGGGACTCCTTTGCTCTTTGG  
 GGCATCCTCTCTTCTCTCTGGGGAATTGATCTCTCCCTCTCTACTTGAATATTCCTACTAG  
 [T, C]  
 GTATACATGGGCTTCCGTGTCTATCCCCCTTGATCCCGCATTGCCGCCAGCCACCCCTCAT  
 TCCTTTAGGCCTTTTACAGCAAAATTGCTGGAAAGGGTGGTCTGAAGTCACCATCACTAC  
 TTCTCCCCCTCACATTCTTTCCAAGCCACCACCTTTATGGGGGCTGCTCCTTTGGAGG  
 CCACTTATGGACATTGCATCACCTTTCTGCTCTTTTATCTTAAGTACCAGTTAGGATGCT  
 TTCAGCTGCCTGTTGAGAATGTCTGATACAAGTGACTTACACAATACGGACATTGACT

22679 TTCCAAGCCACCACCACTTTATGGGGGCTGCTCCTTTGGAGGCCACTTATGGACATTGCA  
 TCACCTTTCTGTCTTTTATCTTAAGTACCAGTTAGGATGCTTTCAGCTGCCTGTTGCA  
 AATGCTCTGATACAAGTGACTTACACAATACGGACATTGACTGTTAAGAGAGTTACGTTT  
 TCACTGAACAAGGATGTTCCAGGCTTGGCTTGGGTGTTTCATAACACCTTCAAGGACCCA  
 GACTTCAGTTTCTGCCCTGCCTCTCTGATCACATCAGCAGATATTATGTCGTCTAAAA  
 [A, G]  
 CAGGGAAGGGAGTGAAGTAGCCTCTGTGTTTTTCTTTTATCATGGAGGATGTTTTTTTT  
 GCCCTGCAAGCCCCATGCACATTTCTTAAATATCACCCCTTAACTCATCCCTGGCAAAG  
 GGGATGGTATTATCCTTATTGGCTTGGACCAATTAAGATTTCATCCCTGAGTCTGTGAA

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TGGGACGCATCTTCTTTGAAATGTTGTCATTTAACCAAAATTGGATCTGTTAAAGGAAGG  
GGGAGCGCCTAAGGTGAAAGTGCCAGGCAGTGTCTGCCACATTTCCCTGACCCTTCCTA

23178 AAATGTTGTCATTTAACCAAAATTGGATCTGTTAAAGGAAGGGGAGCGCCTAAGGTGAA  
AGTGCCAGGCAGTGTCTGCCACATTTCCCTGACCCTTCCTAGCAATTTTGACAGCCAGC  
CAGCCCATCTTCTGAAGCACTTCATTTCCATCACATGCTTTGTGACATCATTTCTCT  
GGGTTTTATTTATTTATTTATTTATTTATTTATTTGAGACAAAATCTCTCTGTTGCC  
AGGCTGGAGTGCAGTGGCACGATCTCAATTCAC TGCAACCTCTGCCTCCCGGGTTCAAGT  
[T, C, G]  
ATTTTCCTGCCTCAGCCTCCCAAGTAGCTGGGATAACAGGCATGTGCCACCACACCTAGC  
TAATTTTTGTATTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGACTGGTCTTGAAC  
TCCTGACCTCAGGTGATCCACCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGTCATAA  
GCCACCGCGCCTGGCCGCTCTGGGTTTTCTTTAACTTTCTGGCCACTCCTGTTTCCTG  
TTGACTCCTTTCTCATTGCTCTACCTCAATTGGTGAATGCCCAAATAGTTAGACCTGA

23370 TTTATTTATTTTATTTATTTATTTGAGACAAAATCTCTCTCTGTTGCCAGGCTGGAGTGC  
AGTGGCAGATCTCAATTCAC TGCAACCTCTGCCTCCCGGGTTCAAGTGATTTTCCTGCC  
TCAGCCTCCCAAGTAGCTGGGATAACAGGCATGTGCCACCACACCTAGCTAATTTTTGT  
TTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGACTGGTCTTGAACCTCTGACCTCA  
GGTGATCCACCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGTCATAAGCCACCGCGCC  
[T, G]  
GGCCGCTCTGGGTTTTCTTTAACTTTCTGGCCACTCCTGTTTCCTGTTGACTCCTTTT  
TCATTGCTCTACCTCAATTGGTGAATGCCCAAATAGTTAGACCTGAGGTCTCTTGT  
CAGGATCTGTAGGTCTCTGAGTGATCTCAGCAGTCCCTTTGTATCATCTATATGCCGA  
GTATATCCTAACTTGCTTCTCTCAAGAGTTTGTCTCATCTCATTGAATGAGTTTCCCCT  
CATTGATGGGCACCGCCATCTATCTGTATAGTTGCTTAAAGTACGGGCATGTTGCATGAG

23583 CAGACTGGTCTTGAACCTCTGACCTCAGGTGATCCACCCGCCTCGGCCTCCCAAAGTGCT  
GGGATTACAGTCATAAGCCACCGCGCCTGGCCGCTCTGGGTTTTCTTTAACTTTCTGG  
CCACTCCTGTTTTCTGTTGACTCCTTTCTCATTGCTCTACCTCAATTGGTGAATGCC  
AAATAGTTAGACCTGAGGTCTTCTTGTCAGGATCTGTAGGTTCTCCTGAGTGATCTCAG  
CAGTCCCTTTGTATCATCTATATGCCGAGTATATCCTAACTTGCTTCTCTCAAGAGTTT  
[A, G]  
TCATCTCATTGAATGAGTTTCCCATCTCATTGATGGGCACCGCCATCTATCTGTATAGTT  
GCTTAAAGTACGGGCATGTTGCATGAGTCTCTGTTTCCACCCCTGCCATTTTGTCTC  
CACTCACCAGCAAGTCTGCCTGATACGATATCTAGAACACATCCAGAATCTGTTTGT  
CTCTCCATTTCTGCTCCTGCCACCTCATTCCACGCATCTTCTGTTGGAGAGCTGACA  
GCCTTTTTATCGGCCTCCTTTCTTACCCTTGCTCCCAATAATTGATCCTCCGTGGAAC

24159 CCCAATAATTGATCCTCCGTGGAACAGCCACAATGATCTTTAAAAATATGAATCTGATT  
TCTCTTGACCCGCAGCTTAAATTTCTCTATCGGTTCTCTTTCCACTCGGCATAAAATCT  
GCTTTCTGGTGCTGGCCTGCAGCACCTGAGTGCTGGCTGTGCTGACCTCCTTTCCAAGG  
CTGGTCTTGAGCCGTCTTCTCTAACCCTATGCTGCACCTTCTTCTGCTTTCTCTGAAATA  
AACAAAGCTCCTCCTGATCTGAGGGCCTTTACGGGACCTCTTTTTTTTTTTTTCTCCTAG  
[G, A]  
ATTATCTTCTGCCCAATTTTCATAGGACTGGCTTCTCCTCGCCTCTGAAATCTCAGTCCA  
AATGTCATGTCTCCCAAGAATCTTTCTTAACCGCCCACTCCTGCTGGGCACCTCTGTT  
GTAGCATACTGTTAGGAGTCTCTGCATCATGCCTCTAACTCTTTGAAAAAAGTTCTATT  
TGTTAGTTTAATAAACTAAACTAAAAATTTATAAACCAAAATTTCAAATTTTAAAAAT  
TAATAAACTAAAAACAGTACAATGATATCTCTGTGAAGTCAAGGGAGGAGAGAGTTTTAA

24307 GAGTGCTGGCTGTGCTGACCTCCTTTCCAAGGCTGGTCTTGAGCCGTCTTCTCTAACCT  
ATGCTGCACTTCTTTCTGCTTTCCCTGAATAAAACAAGCTCCTCCTGATCTGAGGGCCTT  
TACGGGACCTCTTTTTTTTTTTTTCTCCTAGGATTATCTTCTGCCCAATTTTCATAGGA  
CTGGCTTCTCCTCGCCTCTGAAATCTCAGTCCAATGTCATGTCTCCCAAGAATCTTCT  
CTAACCGCCCACTCCTGCTGGGCACCTCTGTTGTAGCATACTGTTAGGAGTCTCTGCAT  
[C, T]  
ATGCCTCTAACTCTTTGAAAAAAGTTCTATTTGTTAGTTTAAATAAACTAAACTAAAA  
ATTTATAAACCAATTTCAAATTTTAAAAATTAATAAACTAAAAACAGTACAATGATAT  
CTCTGTGAAGTCAAGGGAGGAGAGAGTTTAAAGAAGGGGAACCTAATTAGCAGCACTAAA  
GGCTCTACAACGACTCAAGATAATGATAATGATGATGATGATGATGGTGATAATGACAGT  
GATAACTAACATTTATGTTACTATGAACCTGGAAGAGTGCCAGGCATTTTGCCTACATT

FIGURE 3, page 60 of 107

24493 TCTCCTCGCCTCTGAAATCTCAGTCCAAATGTCATGTCTCCAAGAATCTTTCTCTAACC  
GCCCCTCCTGCTGGGCACCCCTCTGTTGTAGCATACTGTTAGGAGTCTCTGCATCATGCC  
TCTAACTCTTTGAAAAAAGTTCTATTGTTAGTTAATAAACTAAAACTAAAAATTTA  
TAAACCAAATTTCAAATTTTAAAAATTAATAAACTAAAAACAGTACAATGATATCTCTG  
TGAAGTCAAGGGAGGAGAGAGTTTAAAGAAGGGGAAGTTAATTAGCAGCACTAAAGGCTC  
[T, C]  
ACAACGACTCAAGATAATGATAATGATGATGATGATGATGGTGATAATGACAGTGATAAC  
TAACATTTATTGTTACTATGAACCTGGAAGAGTGCCAGGCATTTTGCCTACATTATCATA  
TTTAATCTGCAGATTAAAAGTCTGACAATGCCTCTACTGTCAAGGAATGTTATTCTC  
ATTCTCAGAACACTGAGACTTAGGGAGGTGAGTCAAAGTGCCCTGGCACATGGTAGCTTTC  
GATTAATGTTTGTATGTGAGTAAATAAATTTCCACAAGGTCTGGAGCTGGTGAATGGT

24822 ATGATGATGATGGTGATAATGACAGTGATAACTAACATTTATTGTTACTATGAACCTGGA  
AGAGTGCCAGGCATTTTGCCTACATTATCATATTTAATCTGACAGATTAAAAGTCCCTGA  
CAATGCCTCTACTGTCAAGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGG  
TCAGTCAAAGTGCCCTGGCACATGGTAGCTTTTGATTAATGTTTGTATGTGAGTAAATAA  
ATTTCCACAAGGTCTGGAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGAC  
[C, T]  
GAATCCAAAGTCCGTATTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAAC  
CCCTTAACAGATTGAGAAAAGGAAGCCTAATATAGGATAAATGATTCTTATTTATTAA  
AACATGATAAATAAAATTAATTTTCAGTCCAAAACCTTCTGAATTTTGGAAATCTGGACT  
CCATTCAATTCATTTGAAGGCATAGGTGAGTTCTTTAAAGAAGCATTAGGAATGA  
ATCCAGATTGAACAATTTCTTATTAAATACCCTAAAGATGCATTCTTATGATGAGCCA

24946 GCCTCTACTGTCAAGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGGTGAG  
TCAAAGTGCCCTGGCACATGGTAGCTTTGATTAATGTTTGTATGTGAGTAAATAAATTT  
CCACAAGGTCTGGAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGACCGAA  
TCCAAAGTCCGTATTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAACCCC  
TTAACAGATTGAGAAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTTATTTAAAC  
[-, A]  
TGATAAATAAAATTAATTTTCAGTCCAAAACCTTCTGAATTTTGGAAATCTGGACTCCAT  
TCATTCAATTCATTTGAAGGCATAGGTGAGTTCTTTAAAGAAGCATTAGGAATGAATCC  
AGATTGAACAATTTCTTATTAAATACCCTAAAGATGCATTCTTATGATGAGCCAGGTT  
CATTGTCCAGGAAAGCTATTAAAACTCAGTCTTTGTGATGAGTGCAGTAAGAACCCCACT  
TGAATTACGTAGTGAGCAGGTGCTTCTAAACCAAGTTTCATGTTTGACAAGCTAGGAGA

24947 CCTCTACTGTCAAGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGGTGAGT  
CAAAGTGCCCTGGCACATGGTAGCTTTGATTAATGTTTGTATGTGAGTAAATAAATTT  
CACAAGGTCTGGAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGACCGAAT  
CCAAAGTCCGTATTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAACCCCT  
TAACAGATTGAGAAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTTATTTAAACA  
[-, A, T]  
GATAAATAAAATTAATTTTCAGTCCAAAACCTTCTGAATTTTGGAAATCTGGACTCCATT  
CATTCAATTCATTTGAAGGCATAGGTGAGTTCTTTAAAGAAGCATTAGGAATGAATCCA  
GATTGAACAATTTCTTATTAAATACCCTAAAGATGCATTCTTATGATGAGCCAGGTTT  
ATTGTCCAGGAAAGCTATTAAAACTCAGTCTTTGTGATGAGTGCAGTAAGAACCCCACT  
GAATTACGTAGTGAGCAGGTGCTTCTAAACCAAGTTTCATGTTTGACAAGCTAGGAGAG

24959 AGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGGTGAGTCAAAGTGCCCTGG  
CACATGGTAGCTTTGATTAATGTTTGTATGTGAGTAAATAAATTTCCACAAGGTCTG  
GAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGACCGAATCCAAAGTCCGTA  
TTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAACCCCTTAACAGATTGAG  
AAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTTATTTAAACATGATAAATAAA  
[T, C]  
TAATTTTCAGTCCAAAACCTTCTGAATTTTGGAAATCTGGACTCCATTCAATTCAT  
TTGAAGGCATAGGTGAGTTCTTTAAAGAAGCATTAGGAATGAATCCAGATTGAACAATT  
TTCTTATTAAATACCCTAAAGATGCATTCTTATGATGAGCCAGGTTTATTGTCCAGGAA  
AGCTATTAAAACTCAGTCTTTGTGATGAGTGCAGTAAGAACCCCACTTGAATTACGTAGT  
GAGCAGGTGCTTCTAAACCAAGTTTCATGTTTGACAAGCTAGGAGAGAACCCAGTGTTA

25321 TGAAGGCATAGGTGAGTTCTTTAAAGAAGCATTAGGAATGAATCCAGATTGAACAATTT  
TCTTATTAAATACCCTAAAGATGCATTCTTATGATGAGCCAGGTTTATTGTCCAGGAAA  
GCTATTAAAACTCAGTCTTTGTGATGAGTGCAGTAAGAACCCCACTTGAATTACGTAGT

FIGURE 3, page 61 of 107

AGCAGGTGCTTCCTAAACCAAGTTTCATGTTTGACAAGCTAGGAGAGAACCCAGTGTTAA  
ATGTTTTCTGGCATGTTGGCCTTTGGTTTCTCATATTATGGGACATATGTTTAGTGCTTG  
[T, G]

GGTATATGCTTAGCCTACTCTTGTAGGATGACTGAGACCTCACACAACATCAAGGACATA  
GTCTTTGCCTTTGCTGAGTTCAGAGTGTAATTGGAGTGATGAAACATACATGTGAATAAA  
TGCAAAGTCACAAGTAAAGACAGTTAATGTGATTGATGAAGGACGTGTGGCACAAGATGG  
ATAAGAATGAGAAGTAGAAGAAGTAGGTGGTTTGAACCTTTCGTTACTCAGGGAAGGGAA  
TGATGTGGATTGGTGGAGAAGAGAGGGGAGGAAGATGGTTTAAAGCACTGGTAAGATGG

27280 TATGGATACCTTACATGCTAGGTTGAACATGGATTATTTTTCACAGATGATCAGGAGCCA  
TGGAAGGCTACACTAGCTGGGCGTACATAATTTAAGTCAGAGGGACAAATAACTGCAAGC  
TAAATACTCTTAGGGAGAACTGCAGCAATCTGGGTGAGAAACAATGAATTTGTGAGTAG  
TCACCATAGCAAAGGTCTGGGCTAGGGGGGCACTGGAGGAGTAAAAAGAAAGGTTTAAA  
TAGTCACTGAGAGGGCTGAGGACCCACTAGCCACTGGCATAGTGGAGTCAATCATTCTC  
[C, T]

GAAATTACGAGGAGGAGAGGTGGGGCATCTCTAAGGCGTGGAGCAGTGGAGGATGGTGAT  
TGTATGGTAGGGGAAAGAAGATAATGATCGCAGTTCAGTAGGTGATGGATGAGGAGGGG  
AAGGCGTTTTACAGATTATTTACTGGGAAAGAACAGAGGCAGTCCACACTGTAGTTAATT  
CCTTTTATTTTTGTCTTTAAGTATACTCAAGGATAAATAGCCATACAATTTCTGTTTGGC  
TTTTCATGCTGGAGAGGTGCAGAGGTTGCACTGAACGTGGACGATATTAATTTTGACTTG

28062 GTGGCTGTGGATGCAATTCTGCCCTTACACAGAAATGACTCTCCTGGGCATACCTTTAGG  
CAAAGAGCAGATGAACGCATAACGAGCAGCTTTGAGATTTGGTATTTCCACTGCAGAACG  
AAGAGAAGGGTGGCCCACTGGAAATTTCTCAGAGAAACGTCTAAGTCTGCATCTCCAC  
ATCCATTCATTTTCATGCATAGTTCTTTTCATCTGTTGTTTTTAATTTATCTATTTATA  
TAATGTCTATCTCTGTAGTACCTGGGATGAAATGCGCCAATCTGACTGCAATGAATAGG  
[G, A]

CAAAGCAATTCTTGGGAGCTGCTCTGGGCAGGAAGTGGAGGCTGAATTCTTTTAAAGGAA  
AATTTTTTGGGGATCGTGACTCACTGGCCTTCATCCCCATCATCACTGGGATTGGTTAAG  
TGCCAGGAAACAGCTGGAAGTCGACAGACAATTTAGGGTACAAATGAAAGGAGAAGTTAC  
TGTTAAAGGGATCTGTATTCTCTGTATCAAACCACCAACGCTGTCTCCTAGCTAATAG  
GAACCAAACTGTGCCCTGAGAATGCTGCCAGATGTTTCTCAATAGGCACGTTACGTTTT

29033 ATGTTTCTCCAAGAGAAATGTTCTATTGTACTACATTAATTCTTAGATGCATTTTTGAAT  
TATTTACCCTTCTGAAATCAGAATGTGTCTTACTAGCAATATGTCATAATTTAATTGGCA  
ATTTAAATTTTCAAGAGGCACATAAGATAATGATGTGTTTTGTAATTGACAATGTCTTGA  
TTTGATAGAAGATATTTGTACAATACTATATTGGTACCATGCTTTGGCCGATGTAATGGT  
CCTATTTGGAGTTCCTACTAATGTTAAGCCTCTAGTTTTAGGCGTTGATGTTGGTCCAG  
[G, C]

GACACTAGGACTCAAATGCCAGATGTCCAGGTCTAAGAGAGAAGAATCAGAAGGTGAAT  
GCAGAGCCCAGTGGGTTCAAGCCATGTAGACAATAATAGCAGAATGGAGAGACATTTTCC  
GATGCCTCATGTCATATGCATCTTCTCCTTTCTGGCCTGCCACATAAATTCATTGCAG  
TGCAACTCTGCCAGATATCAGAATAGAGCAGGAGGAAAGAGAAACAGCTGCAGCATGGGA  
GATAGGACTCATACCAAGAGAGATTAGGCTCGGTGTGTATACCTAATGATGGTAAAGTGA

29302 CCTCTAGTTTTAGGCGTTGATGTTGGTCCAGGGACACTAGGACTCAAATGCCAGATGTC  
CAGGTCTAAGAGAGAAGAATCAGAAGGTGAATGCAGAGCCCAGTGGGTTCAAGCCATGTA  
GACAATAATAGCAGAATGGAGAGACATTTTCCGATGCCTCATGTCATGCTATGCATCTTCTC  
CCTTCTGGCCTGCCACATAAATTCATTGCAGTGCAACTCTGCCAGATATCAGAATAGAG  
CAGGAGGAAAGAGAAACAGCTGCAGCATGGGAGATAGGACTCATACCAAGAGAGATTAGG  
[C, -]

TCGGTGTGTATACCTAATGATGGTAAAGTGAACAACCAGGTTACAGTGATAGCAGCAACA  
CGCATTTATCGAGTGTCTATCCACTTCAGAAACACTATTTTTTAAATGATAACAATTTCTA  
CAAGATAAGTATTCATTGATCATCAATATTATCCTTGTTTCATGTGTAATACTGGGGCTC  
AGAGAGGGTAAAAAATTTGTCCAAGGTCATACAGTTAGGAAATGGTAGAACAGGATTCA  
GGCTTTGCTCCATGGGGCATCAAGGTCTGCTCCACTTCCAGTGTGCCATGCAGTTTCCCC

31093 TCTTTTAGAGTTTCCAGTATAAGAACAAATAGATGAGCAAACACATATAAGAAATACATT  
GAAGAGAATTAGAATATTTCATGAATGTACAGTGAGAAATTTTAACTATACAGGGTCAT  
AGTTGACTTCATTTAAATATTTTCTAAGGGTAGAACGCAACATTATTAGAATACCTGAGA  
GGGGAAGGTTGGGACCGTGCCCTTGAAGTAGCATATTAATTTAAGAGAGGAAAGAGAAA  
GCTGGCAATATTTCAAGTCTGGAAGTATCCTTAAGGCAATACTTTGCTGCTGGAATTTG  
[T, C]

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ATTTTAAAGACCAGCCAGAATCTCTTGTGGTCCTTTGCCCATGTAGCCCTATGAGGACGT  
TTGTATATTTGGATTGCTTGAGGCCTGAGTGTCTATGGGCATAGGCAGAGTCATTGGATCA  
ACCCATGTATCTGTTGCTTGACACATTGCTCTGGATACATTGTACCCAAGAAATCAGCCC  
AAGTGGGATCCAGCCCAAAAGAGAATTGTTGATTTTCAAACTGAACAGTCCAGGCAAAG  
CTCAATCTAGGGCTCAGATCATGCATCCAGGACTGCATAGTTCTTCATTTCTTGATTCTGT

31454 TTGTATATTTGGATTGCTTGAGGCCTGAGTGTCTATGGGCATAGGCAGAGTCATTGGATCA  
ACCCATGTATCTGTTGCTTGACACATTGCTCTGGATACATTGTACCCAAGAAATCAGCCC  
AAGTGGGATCCAGCCCAAAAGAGAATTGTTGATTTTCAAACTGAACAGTCCAGGCAAAG  
CTCAATCTAGGGCTCAGATCATGCATCCAGGACTGCATAGTTCTTCATTTCTTGATTCTGT  
CTTCTTTGCATTGCTCTATTCTTAGGCAAGTCCATCTTGGAATCCTAAGGTGGCTGCC  
[G, A]  
AAGGCTGCAGACCCTCCTCTGTCTTCCAGATTTACATCCTTCAGGAGAGCGAAAGCTCAG  
TTCCCTAAGGCTGAAACAAAAGTCTTGCAATGGCATCTTTTTGGTCTGATTGGCCTGTC  
TAGGGTCAGATACTCATTCTTTAATTATCATGGTGGTGATTGGGGGAATCGAATGTGCTA  
ATTGGCTTTGCCCTGGGTTGTGTGCTTCACTCATGGAACCTAAGAGAGAAGCCCAGTGAAG  
CCCAACTCAAGGGCTGAGAGTGGGCTGTAGTGGTTCCCTAAACAAAATCGGTACTGTTG

31834 AAGTCTTGCAATGGCATCTTTTTGGTCTGATTGGCCTGTCTAGGGTCAGATACTCATTC  
TTTAATTATCATGGTGGTGATTGGGGGAATCGAATGTGCTAATTGGCTTTGCCTGGGTTG  
TGTGCTTCACTCATGGAACCTAAGAGAGAAGCCCAGTGAAGCCCACTCAAGGGCTGAGA  
GTGGGCTGTAGTGGTTTCCCTAAACAAAATCGGTACTGTTGACATAATATGGCATGGTCA  
TGGATGCTGAGAGAATGATGTAGAGAAAGGGTGGATGAGAATGGAAGCAGGACTAGGCAC  
[A, G]  
GTGGTTCACACTTGTAACCTCAGCTACTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGC  
CAGGAGTTAGTGACCAGCCTGAGCAACATAGTGAGACCCTATCTCTAAAAAATTTATTT  
TTAAATTAGCCAAGTGTGGTGGTGCATGCCTATAGTCCCAGCTGCTTGGGAGACTGAGGT  
AGGAGGATCGCTTCAAGCCAGGAGTTCAAAGTTACGGTGAGCTATGATTGCACCACTGCA  
CACTAGCCTGGGTAAACAGAGCAAGACTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAA

31936 TTGGCTTTGCCTGGGTTGTGTGCTTCACTCATGGAACCTAAGAGAGAAGCCCAGTGAAGC  
CCAACCTCAAGGGCTGAGAGTGGGCTGTAGTGGTTTCCCTAAACAAAATCGGTACTGTTGA  
CATAATATGGCATGGTCACTGATGCTGAGAGAATGATGTAGAGAAAGGGTGGATGAGAAT  
GGAAGCAGGACTAGGCACAGTGGTTCACTTGTAACTTCAGCTACTTGGGAGGCTGAGG  
CAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCAACATAGTGAGACCCTA  
[C, T]  
CTCTAAAAAATTTATTTTAAATTAGCCAAGTGTGGTGGTGCATGCCTATAGTCCCAGC  
TGCTTGGGAGACTGAGGTAGGAGGATCGCTTCAAGCCAGGAGTTCAAAGTTACGGTGAGC  
TATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAGCAAGACTCTGTCCATAAAAA  
GAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGTATGCTAGTTTGGAGGT  
ATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGA

31947 TGGGTTGTGTGCTTCACTCATGGAACCTAAGAGAGAAGCCAGTGAAGCCCAACTCAAGG  
GCTGAGAGTGGGCTGTAGTGGTTTCCCTAAACAAAATCGGTACTGTTGACATAATATGGC  
ATGGTCATGGATGCTGAGAGAATGATGTAGAGAAAGGGTGGATGAGAATGGAAGCAGGAC  
TAGGCACAGTGGTTCACTTGTAACTTCAGCTACTTGGGAGGCTGAGGCAGGAGGATCG  
CTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCAACATAGTGAGACCCTATCTCTAAAAA  
[A, T]  
TTTATTTTAAATTAGCCAAGTGTGGTGGTGCATGCCTATAGTCCCAGCTGCTTGGGAGA  
CTGAGGTAGGAGGATCGCTTCAAGCCAGGAGTTCAAAGTTACGGTGAGCTATGATTGCAC  
CACTGCACACTAGCCTGGGTAAACAGAGCAAGACTCTGTCCATAAAAAAGAAGAAGGAGG  
AGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGTATGCTAGTTTGGAGGTATTGAAGTCCA  
GGCAAAGAATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGAGAGTGGTGGAT

31980 AGAAGCCCACTGAAGCCCAACTCAAGGGCTGAGAGTGGGCTGTAGTGGTTTCCCTAAACA  
AAATCGGTACTGTTGACATAATATGGCATGGTCACTGATGCTGAGAGAATGATGTAGAGA  
AAGGGTGGATGAGAATGGAAGCAGGACTAGGCACAGTGGTTCACTTGTAACTTCAGCT  
ACTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCA  
ACATAGTGAGACCCTATCTCTAAAAAATTTATTTTAAATTAGCCAAGTGTGGTGGTGC  
[A, G]  
TGCTATAGTCCCAGCTGCTTGGGAGACTGAGGTAGGAGGATCGCTTCAAGCCAGGAGTT  
CAAAGTTACGGTGAGCTATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAGCAAGA  
CTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGT

ATGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGCAGAG  
TGACTGCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAATCCAC

32156 AGCTACTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTG  
AGCAACATAGTGAGACCCTATCTCTAAAAAAATTTATTTTAAATTAGCCAAGTGTGGTG  
GTGCATGCCTATAGTCCCAGCTGCTTGGGAGACTGAGGTAGGAGGATCGCTTCAGCCCAG  
GAGTTCAAAGTTACGGTGAGCTATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAG  
CAAGACTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAG  
[T, G]  
GGGTATGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGC  
AGAGTGACTGCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAAT  
CCACAGCATTGTGCTGATGAAATACATGTTGAAGATGGTAAGGAAAATAATTAAAAATGAT  
TCCTAGGCTTGTGGACTGAGTAACTTGGGAGGATGGTGGTAGCATTCTTGAGATAGGTA  
AGAATGGAGGGTTTTATTATTTTAAATCAACTATGCTATTCTAGCTCTGTGGGATTTG

32161 CTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCAA  
CATAGTGAGACCCTATCTCTAAAAAAATTTATTTTAAATTAGCCAAGTGTGGTGGTGCA  
TGCTATAGTCCCAGCTGCTTGGGAGACTGAGGTAGGAGGATCGCTTCAGCCCAGGAGTT  
CAAAGTTACGGTGAGCTATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAGCAAGA  
CTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGT  
[A, G]  
TGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGCAGAGT  
GACTGCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAATCCACA  
GCATTTGCTGATGAAATACATGTTGAAGATGGTAAGGAAAATAATTAAAAATGATTCCCTA  
GGCTTGTGGACTGAGTAACTTGGGAGGATGGTGGTAGCATTCTTGAGATAGGTAAGAAT  
GGAGGGTTTTATTATTTTAAATCAACTATGCTATTCTAGCTCTGTGGGATTTGAGAAG

32436 GAGGCTAAGAAGAAAGGAAGTGGGTATGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGA  
ATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGAGAGTGGTGGATGGGTTTGA  
TTTCTAGTTTGGAGATGGAATCCACAGCATTGCTGATGAAATACATGTTGAAGATGGTA  
AGGAAAATAATTAAAAATGATTCTTAGGCTTGTGGACTGAGTAACTTGGGAGGATGGTGG  
TAGCATTCTTGAGATAGGTAAGAATGGAGGGTTTTATTATTTTAAATCAACTATGCT  
[A, G]  
TTCTAGCTCTGTGGGATTTGAGAAGCCTGTTAATATCTGAGTGGGAATGTCAATTGGACA  
GTTGGAGACAGGAGTCTGGAATTTAGAGGGTAGAGCTGGAAATATATATTTCATGGATATA  
TGAATCCATAATGAGAAGGGGTGGCTATAGCAGTTTTATTTTACTTTTAAAGCCATTT  
AACTAGTTTTATTAAATTTGGCGGGCCTTCTTGAGAGTACAAACCATAAATCACTTCATTTA  
TCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGCCAACCTGGATGATACACCAGAAA

32490 CAAAGAATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGAGAGTGGTGGATGG  
GTTTGATTTCTAGTTTGGAGATGGAATCCACAGCATTGCTGATGAAATACATGTTGAAG  
ATGGTAAGGAAAATAATTAAAAATGATTCTTAGGCTTGTGGACTGAGTAACTTGGGAGGA  
TGGTGGTAGCATTCTTGAGATAGGTAAGAATGGAGGGTTTTATTATTTTAAATCAAC  
TATGCTATTCTAGCTCTGTGGGATTTGAGAAGCCTGTTAATATCTGAGTGGGAATGTCAA  
[T, C]  
TGGACAGTTGGAGACAGGAGTCTGGAATTTAGAGGGTAGAGCTGGAAATATATATTTCATG  
GATATATGAATCCATAATGAGAAGGGGTGGCTATAGCAGTTTTATTTTACTTTTAAAG  
CCATTTAACTAGTTTATTAAATTTGGCGGGCCTTCTTGAGAGTACAAACCATAAATCACTT  
CATTTATCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGCCAACCTGGATGATACAC  
CAGAAATACCTCACAGCTTTTCCAGGCACTTTAAAAATCAAATCAAGTAAAATAGAAATA

32526 GCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAATCCACAGCAT  
TTGCTGATGAAATACATGTTGAAGATGGTAAGGAAAATAATTAAAAATGATTCTTAGGCT  
TGTGGACTGAGTAACTTGGGAGGATGGTGGTAGCATTCTTGAGATAGGTAAGAATGGAG  
GGTTTTATTATTTTAAATCAACTATGCTATTCTAGCTCTGTGGGATTTGAGAAGCCTG  
TTAATATCTGAGTGGGAATGTCAATTGGACAGTTGGAGACAGGAGTCTGGAATTTAGAGG  
[G, A]  
TAGAGCTGGAAATATATATTTCATGGATATATGAATCCATAATGAGAAGGGGTGGCTATAG  
CAGTTTTATTTTACTTTTAAAGCCATTTAACTAGTTTATTAAATTTGGCGGGCCTTCTT  
GAGAGTACAAACCATAAATCACTTCATTTATCTTCAACTCCTACCTTCACTCTTGCCCTG  
TGAGGCCAACCTGGATGATACACCAGAAATACCTCACAGCTTTTCCAGGCACTTTAAAA  
ATCAAATCAAGTAAAATAGAAATAAAAAATTGTACTTTTTTTTTCAGATATTCAAAGTCC

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32893 TTATTTTACTTTTAAAGCCATTTAACTAGTTTATTAAATTGGCGGGCCTTCTTGAGAGT  
ACAAACCATAAATCACTTCATTATCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGC  
CAACCCTGGATGATACACCAGAAATACCTCACAGCTTTTCCAGGCACCTTAAAAATCAAA  
TCAAGTAAAAATAGAAAATAAAAAATTGACTTTTTTTTTCAGATATTCAAAAGTCCAGTTT  
ACATGAATCAAAACATCAACCTCTCATCCAATTCAAAGCTCTCTTTCAGCCGGGTGAGGT  
[A, G]  
GCTTGTGCCTGTAATCCCAGCACTTATGGGAGGCCGAGGCAGGCCATCGCTTGAGCCAG  
GAGCTTGAGACCAGCCTGGTGAACCCCTGTCTCTACTGAAAATACAAAACTAGCTGGGC  
GTGGTGGTGTGTGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCACAAGAGTCGCTTGA  
ACAAAGTGGGAGGACTTTGCAGTGAGCAGAGATCGTGCCACTGCACCCAGCCTGGGTGA  
CAGAGCCAGTCCCTGTCCAAAACAAAACAAAACAAAAAACCTGTAATCCCAGCACTCTG

32900 TACTTTTAAAGCCATTTAACTAGTTTATTAAATTGGCGGGCCTTCTTGAGAGTACAAACC  
ATAAATCACTTCATTATCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGCCAACCTT  
GGATGATACACCAGAAATACCTCACAGCTTTTCCAGGCACCTTAAAAATCAAAATCAAGTA  
AAATAGAAAATAAAAAATTGACTTTTTTTTTCAGATATTCAAAAGTCCAGTTTACATGAA  
TCAAAACATCAACCTCTCATCCAATTCAAAGCTCTCTTTCAGCCGGGTGAGGTAGCTTGT  
[G, T]  
CCTGTAATCCCAGCACTTATGGGAGGCCGAGGCAGGCCATCGCTTGAGCCAGGAGCTTG  
AGACCAGCCTGGTGAACCCCTGTCTCTACTGAAAATACAAAACTAGCTGGGCGTGGTGG  
TGTGTGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCACAAGAGTCGCTTGAACAAGTG  
GGGAGGACTTTGCAGTGAGCAGAGATCGTGCCACTGCACCCAGCCTGGGTGACAGAGCC  
AGTCCCTGTCCAAAACAAAACAAAACAAAAAACCTGTAATCCCAGCACTCTGGGAGGCC

33087 AATAAAAAATTGACTTTTTTTTTTTCAGATATTCAAAAGTCCAGTTTACATGAATCAAAAC  
ATCAACCTCTCATCCAATTCAAAGCTCTCTTTCAGCCGGGTGAGGTAGCTTGTGCCTGTA  
ATCCAGCACTTATGGGAGGCCGAGGCAGGCCATCGCTTGAGCCCAGGAGCTTGAGACCA  
GCCTGGTGAACCCCTGTCTCTACTGAAAATACAAAACTAGCTGGGCGTGGTGGTGTGTG  
CCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCACAAGAGTCGCTTGAACAAGTGGGGAGG  
[A, G]  
CTTTGCAGTGAGCAGAGATCGTGCCACTGCACCCAGCCTGGGTGACAGAGCCAGTCCCT  
GTCCAAAACAAAACAAAACAAAAAACCTGTAATCCCAGCACTCTGGGAGGCCGAGGTGG  
GTACATCACCTGAGGTGGCAGTTCAAGACCTGCCTGGCCAAAATGGTAAAACCCCGTCT  
CTACTGAAAATACAAAAAATTGGCTGGGCATTGTGGCGGGTGCCTATAATCCAGATATT  
CAGGATGCTGAGGCAGGAGAATTGCTTGAACCCGGGAGGCAGAGTTTATATTGAGCCGAG

33474 CCTGTAATCCCAGCACTCTGGGAGGCCGAGGTGGGTACATCACCTGAGGTGGCAGTTCA  
AGACCTGCCTGGCCAAAATGGTAAAACCCCGTCTCTACTGAAAATACAAAAAATTGGCTG  
GGCATTGTGGCGGGTGCCTATAATCCAGATATTGAGGATGCTGAGGCAGGAGAATTGCT  
TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG  
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA  
[C, G]  
CTCTCCTTTCCCTGTAGGCCAGGCCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG  
GAAGGCGGGGGCCGTGGCTGTTCCCTTTCCCTCCTTGTGCACACTCCTTTCTGTCTGGCT  
TTGTCTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGAGAAGGTGACTAGAAAGCAAGGG  
TGTTTTACTTAGCTGGTGTCTTCTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG  
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGCTTTCCTCTA

33474 CCTGTAATCCCAGCACTCTGGGAGGCCGAGGTGGGTACATCACCTGAGGTGGCAGTTCA  
AGACCTGCCTGGCCAAAATGGTAAAACCCCGTCTCTACTGAAAATACAAAAAATTGGCTG  
GGCATTGTGGCGGGTGCCTATAATCCAGATATTGAGGATGCTGAGGCAGGAGAATTGCT  
TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG  
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA  
[C, T, G]  
CTCTCCTTTCCCTGTAGGCCAGGCCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG  
GAAGGCGGGGGCCGTGGCTGTTCCCTTTCCCTCCTTGTGCACACTCCTTTCTGTCTGGCT  
TTGTCTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGAGAAGGTGACTAGAAAGCAAGGG  
TGTTTTACTTAGCTGGTGTCTTCTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG  
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGCTTTCCTCTA

33474 CCTGTAATCCCAGCACTCTGGGAGGCCGAGGTGGGTACATCACCTGAGGTGGCAGTTCA  
AGACCTGCCTGGCCAAAATGGTAAAACCCCGTCTCTACTGAAAATACAAAAAATTGGCTG  
GGCATTGTGGCGGGTGCCTATAATCCAGATATTGAGGATGCTGAGGCAGGAGAATTGCT  
TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG  
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA  
[C, T, G]  
CTCTCCTTTCCCTGTAGGCCAGGCCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG  
GAAGGCGGGGGCCGTGGCTGTTCCCTTTCCCTCCTTGTGCACACTCCTTTCTGTCTGGCT  
TTGTCTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGAGAAGGTGACTAGAAAGCAAGGG  
TGTTTTACTTAGCTGGTGTCTTCTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG  
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGCTTTCCTCTA

FIGURE 3, page 65 of 107

TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG  
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA  
[C, T, G]

CTCTCCTTTCCCTGTAGGCCAGGCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG  
GAAGGCGGGGGCGTGGCTGTTCCCTTTCCCTCCTTGTGCACACTCCTTTCTGCTGGCT  
TTGCTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGGAGAAGGTGACTAGAAAGCAAGGG  
TGTTTTACTTAGCTGGTGTCTTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG  
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCCAGACTTTCTCTTA

33741 ACAACAGCAACAACAACAAAACAAAATCACAAAGCTCTCCTTTCCCTGTAGGCCAGGCCT  
GGCCTGAGACACTGCAGATCAGCCATGGGAAAGGGAAGGCGGGGGCGTGGCTGTTCCCTT  
TTCCCTCCTTGTGCACACTCCTTTCTGCTGGCTTTGCTGCTTTTGGCTCCACCACAGTC  
AAGGGGCAGGGAGAAGGTGACTAGAAAGCAAGGGTGTCTTACTTAGCTGGTGTCTTAT  
GGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTGCAGGTGTCCAGCTTTTGTGAGTTCTT  
[C, G]  
GCCACCCCTGTGAAGACCCCCAGACTTTCTCTACAGACATGGATGATGCCCTCCCTGGCT  
GGTCTCTTATGACACCCCGGCCTCTCAGCTTCTGCCTTGAGTGTACCCTGAACCTTTTTT  
TCTCAAGTGGATGGACTTCTTGGGAAGGCTTTTTTCTGAAGGCTTTGATGTAGCTTCTG  
ACCCCATCCAGTGCCTACTTGGCCAGGAGAAACCATTAGGCATCTTGTGCTGCCATAT  
ATGGGGAAGCACGTGACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAA

34043 CCACCCCTGTGAAGACCCCCAGACTTTCTCTACAGACATGGATGATGCCCTCCCTGGCTG  
GTCTCTTATGACACCCCGGCCTCTCAGCTTCTGCCTTGAGTGTACCCTGAACCTTTTTT  
CTCAAGTGGATGGACTTCTTGGGAAGGCTTTTTTCTGAAGGCTTTGATGTAGCTTCTGA  
CCCCATCCAGTGCCTACTTGGCCAGGAGAAACCATTAGGCATCTTGTGCTGCCATATA  
TGGGGAAGCACGTGACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAAC  
[G, A]  
CTGCGCACCCATGTCTGATTTTCCAGGGCCGTCTCATTGCACACCTCCAGAGGGCATCA  
TTCACATGTGTTCTCCTAGAATTGCACAGTTAATGTGGCAGCCCTGAGTTCAGACAAATC  
TCTCATGCCCTACCTGTAGCAGTGCATTCTATGAAGTATGCAGTTCAGCAGGCACCCAG  
CTGGGGTTCCAGATGCTGAGACCCCTTCTGCCAACCCCTCTGATCTCTGAGCAGTTCTC  
TTTCTGCTCCTTCATTTGCCATAGTGTGCAATGCTATGTGTTCTTTCTGCTAAGAAAT

34053 AAGACCCCCAGACTTTCTCTACAGACATGGATGATGCCCTCCCTGGCTGGTCTCTTATG  
ACACCCCGGCCTCTCAGCTTCTGCCTTGAGTGTACCCTGAACCTTTTTTCTCAAGTGGGA  
TGGACTTCTTGGGAAGGCTTTTTCTGAAGGCTTTGATGTAGCTTCTGACCCCATCCAG  
TGCCCTACTTGGCCAGGAGAAACCATTAGGCATCTTGTGCTGCCATATATGGGGAAGC  
ACGTGACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAACGCTGCGCACC  
[C, T]  
ATGTCTGATTTTCCAGGGCCGTCTCATTGCACACCTCCAGAGGGCATCATTCACATGTG  
TTCTCCTAGAATTGCACAGTTAATGTGGCAGCCCTGAGTTCAGACAAATCTCTCATGCCC  
CTACCTGTAGCAGTGCATTCTATGAAGTATGCAGTTCAGCAGGCACCCAGCTGGGGTTCC  
AGATGCTGAGACCCCTTCTGCCAACCCCTCTGATCTCTGAGCAGTTCTCTTTCTGCTCC  
TTCATTTGCCATAGTGTGCAATGCTATGTGTTCTTTCTGCTAAGAAATGCTTTTTCTC

34297 GACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAACGCTGCGCACCCATG  
TCTGATTTTCCAGGGCCGTCTCATTGCACACCTCCAGAGGGCATCATTCACATGTGTTT  
TCCTAGAATTGCACAGTTAATGTGGCAGCCCTGAGTTCAGACAAATCTCTCATGCCCTA  
CCTGTAGCAGTGCATTCTATGAAGTATGCAGTTCAGCAGGCACCCAGCTGGGGTCCAGA  
TGCTGAGACCCCTTCTGCCAACCCCTCTGATCTCTGAGCAGTTCTTTCTGCTCCTTC  
[A, C]  
TTTGCCATAGTGTGCAATGCTATGTGTTCTTTCTGCTAAGAAATGCTTTTTCTCCAGC  
GAATTCTCTTATATGGCTTAGAGATCATATGCAAGCTCTGCATTGATGGATCCTCAGTCT  
TCAGTTTGTAGAGATCTCAGTATAAACCCCAAGACAACAGGAAAGGGCTCACTTAACATT  
GCCTTGTAACAGAGAAACCTCTCTTTGAATGAAAGCTGTGAGGGAAGCTCAGTATATAA  
AGCAGGTGACATGGTGTCTCCATTGGGGTGGTGGGAACGAGGGGCGGGTGCTCAAGGCT

37209 CAGTGGGGTGGTGAAGGAAGTCTCGCTGAGGAGGCAGCATTGAGCACTGAGAGGGA  
GCTACCCTGTAAAGCCCTGGGCAAGACTGTTCCAGGTTGAGGGAACAACACACGTGCAGT  
CCCTGAGACTAGAGCTAACTTGGACAAATGAGAAGACCAGTGTGGCTGGGCGGTATTGAG  
GGACAGATGGTAGGAGATGAAGGTGGAGAAGTGGGCCATGGCCAGAATTTGGGGATCTAA  
GGACAGGAGTTTGGGAGGTTCCCAAGGAGTTGTGGGAACCCCTCTGGGAAGGTTTTTCAGC  
[T, C, G]

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TGCAGTGAAGGATCGAATTTACATTTTGGCAGGCAGGTTAGGACACTGTTGTGCAGAAA  
CAACAATGGCTAATGGGCTGGTTGAGGTGGGAATGAAAGAAGTGGTGAATGAAATCAGG  
ATGTATTTGGAAGGGAGAGTTGGCTGGACTGGCTGTGGGTGTCAGGGCAGGGTGGAGCCA  
TAGACTACTCTGGATTTTCTGTCCAAGCCCTGGATGAATAGCAGTACCATGAATTGAGAT  
GCACAAGCCTAGGAGAAGAGGCAGATTTGGGATGTGAATGTGTATGAGTGA AAAACAAAAT

37475 GGAGTTGTGGGAACCCCTCTGGGAAGGTTTTTCAGCGTGCAGTGAAGGATCGAATTTACAT  
TTTGGCAGGCAGGTTAGGACACTGTTGTGCAGAAACAACAATGGCTAATGGGCTGGTTGA  
GGTGGGAATGAAAGAAGTGGTGAATGAAATCAGGATGTATTTGGAAGGGAGAGTTGGCT  
GGACTGGCTGTGGGTGTCAGGGCAGGGTGGAGCCATAGACTACTCTGGATTTTCTGTCCA  
AGCCCTGGATGAATAGCAGTACCATGAATTGAGATGCACAAGCCTAGGAGAAGAGGCAGA  
[G, T]  
TTGGGATGTGAATGTGTATGAGTGA AAAACAAAATTTCTCTTTGAATCATGTTCAATGTGC  
TACTTGGACAAGCAGCTAATTGGACAACCTAAGTGTAAAAATTAAATAGTGAACAATGAGT  
GGAACAAAACGTTAGAGCTGTACATTTTGCTTTAGAAGGGGCATACTTTTGTCTTAGAA  
CGTGTGGCAATCTAATACAAATGGCCAACAAACATATGAAAAATGCTCAACATCACTAA  
TGATAAGGGAGATGCAAATCAAACACACAAAGCGATACTGCCCTTACCCCTGCAAGAAATGG

38476 GGATGGAATTGGAGACCAACATTCTAAGTGAAGTAACTCAGGAATGGAAAAACCAACAT  
TGTGTGTTCTTACTTATAAGTGGGAGCTAAGCTATGAGGATGCAAAGGCATCCTCATTGG  
ACTTTGGGGACTTGGTGAAAAGGGTGGGGGCGAGTGGGGATAAAAAGACAGCAAATTTGGGT  
ACAGTGTAACCTGCTCGGGTGATGGGTGCACCAAAATTTACAAGTCACCACTAAAGAGC  
TTAGTCATGTAAACCAACACCACCTCTTCCCCAAAAACCTACAGAAATAATAATAAAAAA  
[A, G]  
AACTGTGGCAATCTAATTGATGATAATTGATGGTAGCATCCATGTTGGGGAAGGAAGGA  
AACAATGCCAACACTATGCTAGCTGCTTCACATGTATTGTTTTTACAGGGTGTAAGGC  
TTGAGAAGCATCTAGTGTCTGTGTGAGATTATGCATTCTGGAGGCAGATTGCTAAGGTT  
CAAGTCTGGCCCTGCCTGTTAGTGGCATGTTCTATGCTTTGCTTGCTTATCTGTAAAAAT  
GGAGTAATAATAACCTTGCTTGTAAAGTTATTTTACATTTAAATGAGTTAATGCATG

38486 GGAGACCAACATTCTAAGTGAAGTAACTCAGGAATGGAAAAACCAACATTGTGTGTTCT  
TACTTATAAGTGGGAGCTAAGCTATGAGGATGCAAAGGCATCCTCATTGGACTTTGGGGA  
CTTGGTGAAAAGGGTGGGGGCGAGTGGGGATAAAAAGACAGCAAATTTGGGTACAGTGTA  
CTGCTCGGGTGATGGGTGCACCAAAATTTACAAGTCACCACTAAAGAGCTTAGTCATGT  
AACCAAAACACCACCTCTTCCCCAAAAACCTACAGAAATAATAATAAAAAAGAAGTTGTGG  
[C, T]  
AATCTAATTGATGATAATTGATGGTAGCATCCATGTTGGGGAAGGAAGGAACAATGCCA  
AACACTATGCTAGCTGCTTCACATGTATTGTTTTTACAGGGTGTAAGGCTTGAGAAGCA  
TCTAGTGTCTGTGTGAGATTATGCATTCTGGAGGCAGATTGCTAAGGTTCAAGTCTTGG  
CCCTGCCTGTTAGTGGCATGTTCTATGCTTTGCTTGCTTATCTGTAAAAATGGAGTAATAA  
TAATACCTTGCTTGTAAGTTATTTTACATTTAAATGAGTTAATGCATGTAAAGCACTT

38576 TGCAAAGGCATCCTCATTGGACTTTGGGGACTTGGTGAAAAGGGTGGGGGCGAGTGGGGA  
TAAAAGACAGCAAATTTGGGTACAGTGTAACACTGCTCGGGTGATGGGTGCACCAAAATTT  
ACAAGTCACCACTAAAGAGCTTAGTCATGTAAACCAACACCACCTCTTCCCCAAAAACCT  
ACAGAAATAATAATAAAAAAGAAGTTGTGGCAATCTAATTGATGATAATTGATGGTAGCA  
TCCATGTTGGGGAAGGAAGGAACAATGCCAACACTATGCTAGCTGCTTCACATGTATT  
[A, G]  
TTTTTTCACAGGGTGTAAGGCTTGAGAAGCATCTAGTGTCTGTGTCAGATTATGCATTCT  
GGAGGCAGATTGCTAAGGTTCAAGTCTGGCCCTGCCTGTTAGTGGCATGTTCTATGCTT  
TGCTTGCTTATCTGTAAAAATGGAGTAATAATAATACCTTGCTTGTAAGTTATTTTACA  
TTTAAATGAGTTAATGCATGTAAAGCACTTGAATAGTGCCTGGTATTGTAATAAACAAT  
AAATGAGCAATTTTAAATGTTACTATTTTATTTTCTCCGTAGGGTGCACCTCAATAGATGG

38810 GTAGCATCCATGTTGGGGAAGGAAGGAACAATGCCAAACACTATGCTAGCTGCTTCACA  
TGTATTGTTTTTTCACAGGGTGTAAGGCTTGAGAAGCATCTAGTGTCTGTGTGAGATTAT  
GCATTCTGGAGGCAGATTGCTAAGGTTCAAGTCTGGCCCTGCCTGTTAGTGGCATGTTCT  
TATGCTTTGCTTGCTTATCTGTAAAAATGGAGTAATAATAATACCTTGCTTGTAAGTTAT  
TTTTACATTTAAATGAGTTAATGCATGTAAAGCACTTGAATAGTGCCTGGTATTGTAAT  
[A, G]  
AACAAATAAATGAGCAATTTTAAATGTTACTATTTTATTTTCTCCGTAGGGTGCACCTCAAT  
AGATGGAAGAGTAGGGCATGTGATAAGGTTTGGCTGTGTTCTCATCCAAATCTCATTG  
AATTGTAGCTCCCATAAATTTTACATGTTGTGGGTGGGACCAGGTGGGAAGTAAGTGAAT

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CATGGGGGCGGTTCCCCCATACTGTTCTCGTGGTAGTGAATAAGTCTCATGAAATCTAAT  
GGTTTTATAAGGGGTTTTCCCTTTCACTTGATTCTCATTCTCTCTTGCCTGCTGCCAAGA

38825 GGGGAAGGAAGGAAACAATGCCAAACACTATGCTAGCTGCTTCACATGTATTGTTTTTCAC  
AGGGTGTAAGGCTTGAGAAGCATCTAGTGTCTGTGTGAGATTATGCATTCTGGAGGCAG  
ATTGCTAAGGTTCAAGTCTGGCCCTGCCTGTTAGTGGCATGTTCTATGCTTTGCTTGCT  
TATCTGTAAAATGGAGTAATAATAATACCTTGCTTGTAAGTTATTTTTACATTTAAATG  
AGTTAATGCATGTAAAGCACTTGGAATAGTGCCTGGTATTGTAATAACAATAAATGAGC  
[A, C]  
ATTTTAATGTTACTATTTTTATTTTCTCCGTAGGGTGCACCTCAATAGATGGAAGAGTAGG  
GCATGTGATAAGGTTTGGCTGTGTCTCATCCAAATCTCATTTTGAATTGTAGCTCCCAT  
AATTTTCACATGTTGTGGGTGGGACCAGGTGGGAAGTAACGAATCATGGGGGCGGTTCC  
CCCATACTGTTCTCGTGGTAGTGAATAAGTCTCATGAAATCTAATGGTTTTATAAGGGGT  
TTTCCCTTTCACTTGATTCTCATTCTCTCTTGCCTGCTGCCAAGAAAGACGTGCCTTTCA

39317 CTCGTGGTAGTGAATAAGTCTCATGAAATCTAATGGTTTTATAAGGGGTTTTCCCTTTCA  
CTTGATTCTCATTCTCTTGCCTGCTGCCAAGAAAGACGTGCCTTTCACCTTCTGCCAT  
AATTGTGAGGACTTCCCAGCCACATGGAACTGTGAGTCCATTAAGCCTCTTTTTCTTTAT  
AAATTAATTACCCAGTCTCAGGTATGTCTTTATCAGCAGTGTCAAAACAGACTAATACAA  
TGTGTTATAACAAGAGTGTTACTTCAGAATCTTGTTTTAACTTGTGTATTAGTCAGTGTG  
[C, T]  
AGGATGCTTGGGTTCTGTCTGGTTTTTGCCATGTTTCCATTTTATGAGCAGTTCCTCTA  
TCACAATATAGATGAATGCCTCTATCACAATATAGATGCAGCAATAAGTTGGGATTGCTG  
CATAGCCATCCCAACTTATTGGCATAAAAACAAGCATTTTATTATGCTCAGATAATGTGCT  
TCAGGGATTTCATGCAGGACACAGAGGCGATGGTTTTGTCTCTATTCTGCAACGTCTGGGGC  
CTCACCTGGGAAGATGAGCCTCACCTGGGAAATCTACAGGTGTCTGTGGGGTTAGGGGAG

40519 TGTGCAAGATCCTGTGCTAATGGCTGTGGGAGCATATTGAGATGCCACAAGAAGTTGGCA  
TGCTAAAAGGTGAAGACAAATACAGATGGCTTTCAATTAAGTAGTCTCTGGAGAGACAGA  
GGCACTCACAACCTCTAATGATAGTTAAATAAACTTATTCAGGCCAGGCACAGTGGC  
TCAGGCCCTATAATCCCAGCACTTTGGGAGGCTGAGGTGGGCGGATCACTTGAGGTACGGA  
GTTCTAGACTACCCCGGCCAACATGGCGAAACCCCATCTCTACTAAAAATACAGAAATTA  
[A, G]  
CCAGGCATGGTGGTGCAGCGCTGTAAATCCCAGTACTTGGGAGGCTGAGGCATGAGAGTC  
GCTTGAATCCGGGAGGCAGAGGTTGCAGTGAACAAAGATGGTGCCACTGCACTCCAGCCT  
GGGCCACAGAGTGAGACTCCACCTCAAAAACAAACAAACAAACAAACACTATTTAAAAACA  
AGACACAAAGTGAGTTTAATGCAAACTTATTTAGTTAGCATTGCATTTAATGTTTCAGGAA  
CACATGTTCCATTTGTAGACTTCATTAATTACAACCTAGCAGTTATTTAAGTGCTTACTA

41468 TCTTTCTCCCGTGCTGGATGCTTCTGCCCCTCCAACATCAGACTCCAAGTTGTTTAGCTT  
TTGGACTCTTGGACTTACACCAGTGGTTTGCCAGGGGCTCTCAGACTTTTGGCCACAGTG  
CACTGTGCGCTTCCCTACGTTTGAAGTTTTTGGGACTTGGGCTGTCTTCTTTGCTCCTCAG  
CTTGACAGATGGCCTATTGTGGGACACCTTGATCATGTGAGTCAATACTCCTTAATAAAA  
TTCCCTTTTCATATGTACATCTATCCTATTAGTTCTGTCTTTCTCGAGAGCCCTGACTAAT  
[A, T, G]  
CAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCCCAGTCCCCAGGTGCATGCTCAATG  
TGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAATCCAGGTTCTGGATTTTCTTCTTGG  
TGTTCTTTCTCTAGACTTGAGGTTTGAATTGTGTTCTCTGAATCTTTGGGTCCTAAAA  
AAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCAAAGCTCATGTGACTCTAGGCCCT  
TACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTAAATTATATTGTGTTAACTTAAT

41468 TCTTTCTCCCGTGCTGGATGCTTCTGCCCCTCCAACATCAGACTCCAAGTTGTTTAGCTT  
TTGGACTCTTGGACTTACACCAGTGGTTTGCCAGGGGCTCTCAGACTTTTGGCCACAGTG  
CACTGTGCGCTTCCCTACGTTTGAAGTTTTTGGGACTTGGGCTGTCTTCTTTGCTCCTCAG  
CTTGACAGATGGCCTATTGTGGGACACCTTGATCATGTGAGTCAATACTCCTTAATAAAA  
TTCCCTTTTCATATGTACATCTATCCTATTAGTTCTGTCTTTCTCGAGAGCCCTGACTAAT  
[A, C, G]  
CAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCCCAGTCCCCAGGTGCATGCTCAATG  
TGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAATCCAGGTTCTGGATTTTCTTCTTGG  
TGTTCTTTCTCTAGACTTGAGGTTTGAATTGTGTTCTCTGAATCTTTGGGTCCTAAAA  
AAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCAAAGCTCATGTGACTCTAGGCCCT  
TACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTAAATTATATTGTGTTAACTTAAT

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41565 CTCTCAGACTTTTGGCCACAGTGCAGTGTGGCTTCCCTACGTTTGAGTTTTTGGGACTT  
GGGCTGTCTTCTTTGCTCCTCAGCTTGCAGATGGCCTATTGTGGGACACCTTGTGATCAT  
GTGAGTCAATACTCCTTAATAAAATCCCTTTCATATGTACATCTATCCTATTAGTTCTGT  
CTTTCTCGAGAGCCCTGACTAATGCAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCC  
CAGTCCCCAGGTGCATGCTCAATGTGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAAT  
[A, C]  
CAGGTTCTGGATTTTCTTCTTGGTGTCTTTCCCTCTAGACTTGAGGTTTTGAATTGTGTT  
CCTGAATCTTTTGGGTCCTAAAAAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCA  
AAGCTCATGTGACTCTAGGCCCTTACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTA  
AATTATATTGTGTAAACTTAATATATGATACATAGTATAATGCAATACTTAATATATAT  
TTAATATATTTGTAACATACAAAATACAATATCCAAGAGCAGTATGGAACACCAAAAGGT

41625 GGGCTGTCTTCTTTGCTCCTCAGCTTGCAGATGGCCTATTGTGGGACACCTTGTGATCAT  
GTGAGTCAATACTCCTTAATAAAATCCCTTTCATATGTACATCTATCCTATTAGTTCTGT  
CTTTCTCGAGAGCCCTGACTAATGCAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCC  
CAGTCCCCAGGTGCATGCTCAATGTGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAAT  
CCAGGTTCTGGATTTTCTTCTTGGTGTCTTTCCCTCTAGACTTGAGGTTTTGAATTGTGT  
[A, T]  
CCTGAATCTTTTGGGTCCTAAAAAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCA  
AAGCTCATGTGACTCTAGGCCCTTACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTA  
AATTATATTGTGTAAACTTAATATATGATACATAGTATAATGCAATACTTAATATATAT  
TTAATATATTTGTAACATACAAAATACAATATCCAAGAGCAGTATGGAACACCAAAAGGT  
GTTTCAGACTTTTTTTTTTGAGACAGTCTCGCTCTGTCACCAGGCTGGAGTGTGGTGGTGC

41921 GTGTTCTGAATCTTTTGGGTCCTAAAAAGTCTTGGGACCTGCTGCAGGGGTTGAGAAG  
AAGCAAAGCTCATGTGACTCTAGGCCCTTACTCCAAAGTCCAACCAAGTAGCATGCTTTG  
AGGTAAATTATATTGTGTAAACTTAATATATGATACATAGTATAATGCAATACTTAATA  
TATATTTAATATATTTGTAACATACAAAATACAATATCCAAGAGCAGTATGGAACACCAA  
AAGGTGTTTCAGACTTTTTTTTTTGAGACAGTCTCGCTCTGTCACCAGGCTGGAGTGTGGT  
[G, C, T, A]  
GTGCAATCTCAGTCACTGCAACCTCTGCCTCCCTGGTTCAAGCAATTCTCCTGCCTCAG  
CCTCCTGAGTAGCTGGGACTACAGGTGCCACCACCATGCCTGGCTAATTTTTTTTTTGTA  
TTTTTGGTAGAGACGGGGTTTCCCATGTTGGCCAGGACGGTCTCGATCTCTTGACCTCG  
TGATCCACCTGCCTTGGCCTCCCAAAGTACTGGGATTACAGGCGTGAGCCCCCTTCTTCA  
AATGGAATTTTATATCTGTGTTTACATTTTCTGCTTAAAGTTTGAATTTTGTTTAATTCA

42152 GAACACCAAAAGGTGTTTCAGACTTTTTTTTTTGAGACAGTCTCGCTCTGTACCAGGCTG  
GAGTGTGGTGGTGAATCTCAGCTCACTGCAACCTCTGCCTCCCTGGTTCAAGCAATTCT  
CCTGCCTCAGCCTCCTGAGTAGCTGGGACTACAGGTGCCACCACCATGCCTGGCTAATT  
TTTTTTGTATTTTGGTAGAGACGGGGTTTACCATGTTGGCCAGGACGGTCTCGATCT  
CTTGACCTCGTGATCCACCTGCCTTGGCCTCCCAAAGTACTGGGATTACAGGCGTGAGCC  
[C, A]  
CTTCCCTTCAAATGGAATTTTATATCTGTGTTTACATTTTCTGCTTAAAGTTTGAATTTG  
TTTAATTCAATTGAATTTTCCACTTAAATGTAACTTTTGAAACCCACACCTCTGACATA  
TTCCACATTGCTGTTGGATATTTTGTAGTTTAAAGATTGGCCTGTAAGCTGTATCGGTAT  
CATTATTCTAACTTCAGGCTCAAGGTCTCAGTCACTAGTTAAAGTCTTTTCTACCGGCAA  
ATCTGTATTACCATCTACTGTGGAAGATAACCTCTAAAGTGCCCATGTAAGCACAAATCC

42498 AAAGTTTGAATTTTGTTTAATTCAATTGAATTTCCACTTAAATGTAACTTTTGAAACC  
CACACCTCTGACATATTCCACATTGCTGTTGGATATTTTAGTTTAAAGATTGGCCTGT  
AAGCTGTATCGGTATCATTATTCTAACTTCAGGCTCAAGGTCTCAGTCACTAGTTAAAGT  
CTTTTCTACCGGCAAATCTGTATTACCATCTACTGTGGAAGATAACCTCTAAAGTGCCCA  
TGTAAGCACAAATCCATAAAACTAAAAGTCAAAGAAAAAGAGAAAGAGTTTATTCCACT  
[G, T]  
TTTAAAAGTTCAGTTTGATTTAGATCTTATATCTCTTGGGTTTTCTTGACTGATTTTTTA  
CATAAATGTGTCCAGAAAGAGTGATCATATCGTGATCTTTGTTCCAGTTTTCTTTTC  
CACATCAAGTTTTTCTGATGGAAGTGATTTAAAAAAACCCTTAAAGTGTGATAATCACT  
CTCTTCTTTAGTAGACAGTGGAGTTTAAATAGATGCATACAGCAGTTGTTTACTTGTGATG  
AAAAGAAATGTGAATTTTCTGGTGAAGGACATTTCTAGCTCATGTCTAAATTGCAGAGA

42715 GAAGATAACCTCTAAAGTGCCCATGTAAGCACAAATCCATAAAACTAAAAGTCAAAGAAA  
AAAGAGAAAGAGTTTATTCCACTGTTTAAAGTTTCAGTTTGATTTAGATCTTATATCTCT  
TGGGTTTTCTTGACTGATTTTTTACATAAATGTGTCCAGAAAGAGTGATCATATCGTGA

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TCTTTGTTCCAGTTTTCCTTTTCCACATCAAGTTTCTCTGATGGAAAGTGATTTAAAAA  
AACCCCTTAAAGTGTGATAATCACTCTCTTCTTTAGTAGACAGTGGAGTTTAAATAGATGCA  
[T, G, A, C]

ACAGCAGTTGTTTACTTGTGTATGAAAAGAAATGTGAATTTTCTGGTGCAAGGACATTCTT  
AGCTCATGTCTAAATTGCAGAGAGACCACAGTTTGACATAGTGCTGAAGCAGGTTGTAAG  
AGGTAGGGGTACAATGTATGTCTGCACAGGTTGTGCACTATGCGACTGTGAATGGTGTCT  
TCTGGAATTGTCTATGCGGAAGCACTGTGAGGAGTCTGGATTCCAGCCTCTGTTGATT  
TTTGTGCATGGGAGAGCTTGATACCAAGCCTCAAAGTACTAGGAATAAGAAGGTATTACA

42776 AAGAGAAAGAGTTTATTCCACTGTTTAAAGTTTCAAGTTTGTATTAGATCTTATATCTCTT  
GGGTTTTCTTGACTGATTTTTTACATAAATGTGTCCAGAAAGAGTGATCATATCGTGAT  
CTTTGTTCCAGTTTTCCTTTTCCACATCAAGTTTCTCTGATGGAAAGTGATTTAAAAA  
ACCCTTAAAGTGTGATAATCACTCTCTTCTTTAGTAGACAGTGGAGTTTAAATAGATGCAT  
ACAGCAGTTGTTTACTTGTGTATGAAAAGAAATGTGAATTTTCTGGTGCAAGGACATTCTT  
[T, C, A]

GCTCATGTCTAAATTGCAGAGAGACCACAGTTTGACATAGTGCTGAAGCAGGTTGTAAGA  
GGTAGGGGTACAATGTATGTCTGCACAGGTTGTGCACTATGCGACTGTGAATGGTGTCTT  
CTGGAATTGTCTATGCGGAAGCACTGTGAGGAGTCTGGATTCCAGCCTCTGTTGATT  
TTGTGCATGGGAGAGCTTGATACCAAGCCTCAAAGTACTAGGAATAAGAAGGTATTACAT  
GCTGTAATTTTCAAGGTGGTGCCTTTCTGTACCTCCATTGCTTTTAGTTTAGGGCATTTC

43320 GTAATTTTCAAGGTGGTGCCTTTCTGTACCTCCATTGCTTTTAGTTTAGGGCATTTCCTC  
TGCAATCTTTGGAGGGTTCCTAGGAATAAAAAAGTAGCTAGTTTGAGACAGTGTGCAATT  
GTGCTGAAATGGAGACCATTGGGGTAGATGTAGTTCCCTTCATGCCAGTAGCTAATTGG  
CTTAGTTTGTCTGATTGTTCAGGATATTCCCTAAAAATAGGTGTCTTCTAAGCCTCAGC  
TTTGGGCCTTGAGGTATGGCATGGCTATCCGCTCTCTGCTCCTGCTGAGCTAAATGCAGT  
[G, T, C]

CTGAATGCCAAATATTGAGATTGGAATTATCAAAGGACTATTAGCATCAAATTGAGAAA  
CTCAAGCTAAATTGCAAATTAATACAAAATCATGAAGTGAAGCTTCTCTCCAGAGAAC  
TCTTGTAACAGAACTTGAAGGTGGCAGGATGTCTTGATAGAGCGTGATTTTAGAGCTGG  
ATGCATGCTGGGCTTATATCCTGGTCCAGCATTTGCTTGGGCAAGTTATTTACAACCT  
CTGGTTGAGGTGGTTGGACTAGTTGATATCTATGATTCTTTTTAAGTAAATAACTATTA

43341 TTCTGTACCTCCATTGCTTTTAGTTTAGGGCATTTCCTCTGCAATCTTTGGAGGGTTCCT  
AGGAATAAAAAAGTAGCTAGTTTGAGACAGTGTGCAATTGTGCTGAAATGGAGGACCATG  
GGGGTAGATGTAGTTCCCTTCATGCCAGTAGCTAATTGGCTTAGTTTGCTGATTGTTC  
AGGATATTCCCTAAAAATAGGTGTCTTCTAAGCCTCAGCTTTGGGCCTTGAGGTATGGCA  
TGGCTATCCGCTCTCTGCTCCTGCTGAGCTAAATGCAGTCTGAATGCCAAATATTGAGA  
[A, T]

TTGGAATTATCAAAGGACTATTAGCATCAAATTGAGAACTCAAGCTAAATTTGCAAATT  
AATACAAAATCATGAAGTGAAGCTTCTCTTCCAGAGAACCTCTTGTAACAGAACTTGAAGG  
TGGCAGGATGTCTTGATAGAGCGTGATTTTAGAGCTGGATGCATGCTGGGCTTATATCC  
TGGTTCAGCATTTGCCTTGGGCAAGTTATTTACAACCTCTGGTTGAGGTGGTTGGACTA  
GTTGATATCTATGATTCTTTTTAAGTAAATAACTATTAGTTTTTTTCATACAGTATAATT

43424 GAGACAGTGTGCAATTGTGCTGAAATGGAGGACCATGGGGTAGATGTAGTTCCCTTCAT  
GCCAGTAGCTAATTGGCTTAGTTTGTCTGATTGTGTTCCAGGATATTCCCTAAAAATAGGTG  
TCTTCTAAGCCTCAGCTTTGGGCCTTGAGGTATGGCATGGCTATCCGCTCTCTGCTCCTG  
CTGAGCTAAATGCAGTCTGAATGCCAAATATTGAGATTGGAATTATCAAAGGACTATT  
AGCATCAAATTGAGAACTCAAGCTAAATTTGCAAATTAATACAAAATCATGAAGTGAAGC  
[A, G, T]

TCTCTCCAGAGAACCTCTTGTAACAGAACTTGAAGGTGGCAGGATGTCTTGATAGAGCG  
TGGATTTTAGAGCTGGATGCATGCTGGGCTTATATCCTGGTTCCAGCATTTGCCTTGGGC  
AAGTTATTTACAACCTCTGGTTGAGGTGGTTGGACTAGTTGATATCTATGATTCTTTTTT  
AAGTAAATAACTATTAGTTTTTTTCATACAGTATAATTACTATATAACAAACATCTTCTC  
TTTGATTTCATTCATGCATTCAAAGTATTTATTAAATGCCCTCCAATGCCGGACACCATA

43509 CTGATTGTTCAGGATATTCCCTAAAAATAGGTGTCTTCTAAGCCTCAGCTTTGGGCCT  
TGAGGTATGGCATGGCTATCCGCTCTCTGCTCCTGCTGAGCTAAATGCAGTCTGAATGC  
CAAATATTGAGATTGGAATTATCAAAGGACTATTAGCATCAAATTGAGAACTCAAGCT  
AAATTTGCAAATTAATACAAAATCATGAAGTGAAGCTTCTCTTCCAGAGAACCTCTTGTA  
CAGAACTTGAAGGTGGCAGGATGTCTTGATAGAGCGTGATTTTAGAGCTGGATGCATGC  
[A, G, T]

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GGGCTTATATCCTGGTTCAGCATTTGCCTTGGGCAAGTTATTTACAACCTCTGGTTGAG  
GTGGTTGGACTAGTTGATATCTATGATTCTTTTAAAGTAAATACTATTAGTTTTTCA  
TACAGTATAAATTACTATATAACAAACATCTTCTTTGATTTCATTCATGCATTCAAAG  
TATTTATTAAATGCCCTCCAATGCCGGACACCATACTAGGTACTGGGTATATAAGAGTGA  
ACCAAATGAGCAGGGTTTCTGCCCTCAGGGAGTTGATAATCTAGTGGGGAAGGTGTTGGG

44584 CTTACTCAGGGGAAGGTCAGCCATTTGTTCTATTTCAGGCCTCCAACCGATAGGATGTGG  
ACCACCTATGTCGTGGGAGAAATCTGCTTTACTCACTCTGCTAACTTAAATATGAATCCC  
ATCAGAAAGCACCTCACAGAAGTACCCAGAATAATGTTTGACCAAATATCTAAGCATCC  
TCTGACACAGTCAAGTTGTACATAAAATGAACCTATCCTAGGCTACTTAGAGTAGTCAGA  
AGATACCTCTCTGACATGGTAACATTTAAACTGAGACCCAAAGAATGGGAAGGAGCCAGC  
[C, T]  
GTGGAAGAATGGGGGACAGGCCTTCCAGGCAGAAAGAACTGAGTGGTAACCGAGTGGAA  
ACTGAATGGAACTGGAGTCCAGAGGGAAAAGGGGCATGTTGTGAGATGAAATTAGAGAG  
GGGACAGAGGCTTTACTGTGACACCTTGAAGCCATGATAAGGGGCTTGCATTTTATTCT  
AGATGCAACGATGAGAGGCACTGAGTTTGAGCACCTTGAAGCCATGATAAGGGGCTTGC  
ATTTTATTCTAGATGCAGTGATGAGAGGCACTGAAAAGTTTGAGCAAGGAGGAATGTGAG

46250 CCATGATTCAATTACCTCCCCCTGGGTTCTCCCAACACATGGGAATTCTGGGAGATA  
CAGTTCAAGTTGAGACTTGGGTGGGAACACAGCCAAATCATATCACCCAGTTTAGTACTT  
CACTATGTTTTTGGCCAATTATGTTGGGTAGGGGATGGTTGTGCTCCTCTGTCCCTTAC  
CTTAGAGCTGGCAGATAAAATACCAGATATCCAGTTAAATTTGAATTTAGAAAACTTTT  
TAAAAAAGTATAAGTATATCCCAAATATTGCATGGGATATACTTACCCTTTAAAAATTTT  
[A, C, T, G]  
TTGCTATTGTTTTATCTGCAATTCAAATTTTACTGGGTGTCTGTATTTTTGTTTCTGAA  
TCTGGTAGCACACATTGAATTGCACCCTTTAAATGGCTAGAATAGGGAATTTTATGTTA  
TGTCATTGTAACACACACACACACACACACACACACACACACACACACATCTGGC  
AATTCTCCCTTAACTAACTACCATGTAGAAGCTACCATGCGATGCAGTCTATTTCTAGG  
TTTAGCCACAAGGGTCAATAAGAAAATCTGACCTCAAAGGAAATTATGTCTGGTGATGGT

46287 ACACATGGGAATTCTGGGAGATACAGTTCAAGTTGAGACTTGGGTGGGAACACAGCCAAA  
TCATATCACCCAGTTTAGTACTTCACTATGTTTTTGGCCAATTATGTTGGGTAGGGGATG  
GTTGTGCTCCTCCTGTCCCTTACCTTAGAGCTGGCAGATAAAATACCAGATATCCAGTTA  
AATTTGAATTTAGAAAACTTTTAAAAAAGTATAAGTATATCCCAAATATTGCATGGGA  
TATACTTACCCTTTAAAAATTTTATTGCTATTGTTTATCTGCAATTCAAATTTTACTGGG  
[C, T]  
GTCCCTGTATTTTTGTTTCTGAATCTGGTAGCACACATTGAATTGCACCCTTTAAAAATGG  
CTAGAATAGGGAATTTTATGTTATGTGCATTGTAACACACACACACACACACACACAC  
ACACACACACACACGATCTGGCAATCTCCCTTAACTAACTACCATGTAGAAGCTACC  
ATGCGATGCAGTCTATTTCTAGGTTTAGCCACAAGGGTCAATAAGAAAATCTGACCTCAA  
AGGAAATTATGTCTGGTGATGGTTAATGCTTCTACTAAATTCCTTAGAGCATAGGATGC

46566 TGCAATTCAAATTTTACTGGGTGTCTGTATTTTTGTTTCTGAATCTGGTAGCACACAT  
TGAATTGCACCCTTTAAATGGCTAGAATAGGGAATTTTATGTTATGTGCATTGTAACAC  
ACACACACACACACACACACACACACACACACACACACGATCTGGCAATCTCCCTTAACT  
AACTACCATGTAGAAGCTACCATGCGATGCAGTCTATTTCTAGGTTTAGCCACAAGGGT  
CAATAAGAAAATCTGACCTCAAAGGAAATTATGTCTGGTGATGGTTAATGCTTCTACTAA  
[A, C, T, G]  
TTCCCTTAGAGCATAGGATGCTGAGCCCATAGTAGGACCTCATCAATGCTGGTTTGATA  
GAAATTGCATTTGGGGAATAATTAGCAGCTGTTGATAACTGAATGGAAAGAAATGAATAC  
CCTGGTACCTGTGGTACAACCTAAAGAACACCATGAAATGGGCCTCATGGGAGGTTCTCA  
ATGAATTCAGTGGCGTGGCACTTTTGGGCATGCTTTTGAACCAAGTACTTACTCCATGT  
GCCTGTGAGTTTGGCACCTCTCATGCGAGCCCAAGTGCAACTGGTTTCTGAGGGGCCATT

46653 ATAGGGAATTTTATGTTATGTGCATTGTAACACACACACACACACACACACACACACAC  
CACACACACGATCTGGCAATTTCTCCCTTAACTAACTACCATGTAGAAGCTACCATGCG  
ATGCAGTCTATTTCTAGGTTTAGCCACAAGGGTCAATAAGAAAATCTGACCTCAAAGGAA  
ATTATGTCTGGTGATGGTTAATGCTTCTACTAAATTCCTTAGAGCATAGGATGCTGAGC  
CCATAGTAGGACCTCATCAATGCTGGTTTGATAGAAATTGCATTTGGGGAAAATTAGCA  
[G, A]  
CTGTTGATAACTGAATGGAAAGAAATGAACTACCCTGGTACCTGTGGTACAACCTAAAGA  
ACACCATGAAATGGGCCTCATGGGAGGTTCTCAATGAATTCAGTGGCGTGGCACTTTTGG  
GCATGCTTTTGAACCAAGTACTTACTCCATGTGCCTGTGAGTTTGGCACCTCTCATGGC

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AGCCCAAGTGCAACTGGTTTCTGAGGGGCCATTAAAAATCTCCCAATGGCAGACAACTCT  
CAGACATGCCTGCAAATTCCAAGACAGCCAGGCTGATCATCTGCTACTTTAATTGGTTAT

47153 TCTGAGGGGCCATTAAAAATCTCCCAATGGCAGACAACTCTCAGACATGCCTGCAAATTC  
CAAGACAGCCAGGCTGATCATCTGCTACTTTAATTGGTTATACCAGTTTTTATGCCTTTG  
TTTCTCCTCCTTTCTGTGAGGTGGAGGAAACATAACCACAAGACTGTTTCCAGTGACCTC  
TTCAGAGGCAATTCCAAGCAATTAAGTATGGGTTGAATCCAAAGTGTATTGATGAATTA  
AATTCTGTTTCCTTGGCTGAAGATTCTGTTTCCTTGGCTGACACCTGAACTCAAAGGTTAGA  
[T, A]  
TGAATCTCTAGGAAAACGGTTTTTCTCTTGTGTTTTCTGCAGGCTTTGCTGTTTACGA  
AGATCTTGCATCAACACTTAGCATTCACTCACATGGCAAGCTTGCATGTGGTACTTTTCAT  
TCCACATTAATTTAGGGAACCTCTACTATGTGCCAGCATTCAATATCCAATTTGTCTTAGA  
TTTTCGAATAGTGTCCACAATTTTATAACTGGGGAGTTCCTTGAATGGAAATATGTTCA  
CAGTGGCTGCTTAATTGTGACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTGA

47171 ATCTCCCAATGGCAGACAACTCTCAGACATGCCTGCAAATCCAAGACAGCCAGGCTGAT  
CATCTGCTACTTTAATTGGTTATACCAGTTTTTATGCCTTTGTTTCTCCTCCTTTCTGTG  
AGGTGGAGGAAACATAACCACAAGACTGTTTCCAGTGACCTCTTCAGAGGCAATTTCCAA  
GCAATTAAGTATGGGTTGAATCCAAAGTGTATTGATGAATTAATCTGTTTCCTTGGCTG  
AAGATTCTGTTTCCTTGGCTGACACCTGAACTCAAAGGTTAGATTGAACTATCTAGGAAAA  
[C, T]  
GGTTTTTCTCTTGTGTTTTTCTGCAGGCTTTGCTGTTTACGAAGATCTTGCATCAACACT  
TAGCATTCACATGGCAAGCTTGCATGTGGTACTTTTCATTCCACATTAATTTAGGGA  
ACTCTACTATGTGCCAGCATTCAATATCCAATTTGTCTTAGATTTTGAATAGTGTCCCA  
CAATTTTATAACTGGGGAGTTCCTTGAATGGAAATATGTTTACAGTGGCTGCTTAATTGT  
GACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTGATTCTGAGGGTCTAGGAGA

47216 GACAGCCAGGCTGATCATCTGCTACTTTAATTGGTTATACCAGTTTTTATGCCTTTGTTT  
CTCCTCCTTTCTGTGAGGTGGAGGAAACATAACCACAAGACTGTTTCCAGTGACCTCTTC  
AGAGGCAATTTCCAAGCAATTAAGTATGGGTTGAATCCAAAGTGTATTGATGAATTAAT  
TCTGTTCTTGGCTGAAGATTCTGTTTCCTTGGCTGACACCTGAACTCAAAGGTTAGATTG  
AACTATCTAGGAAAACGGTTTTTCTCTTGTGTTTTCTGCAGGCTTTGCTGTTTACGAAG  
[A, T]  
TCTTGCATCAACACTTAGCATTCACTCACATGGCAAGCTTGCATGTGGTACTTTTCATTCC  
ACATTAATTTAGGGAACCTCTACTATGTGCCAGCATTCAATATCCAATTTGTCTTAGATTT  
TCGAATAGTGTCCACAATTTTATAACTGGGGAGTTCCTTGAATGGAAATATGTTTACAG  
TGGCTGCTTAATTGTGACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTGATTCT  
TGAGGGTCTAGGAGAAGGGACACTTCTCATATGGGGAAGACGGGATTAATCCTTGAAAAAT

47484 GTGTTTTCTGCAGGCTTTGCTGTTTACGAAGATCTTGCATCAACACTTAGCATTCACTC  
ACATGGCAAGCTTGCATGTGGTACTTTTCATTCCACATTAATTTAGGGAACCTCTACTATGT  
GCCAGCATTCAATATCCAATTTGTCTTAGATTTTGAATAGTGTCCACAATTTTATAAC  
TGGGGAGTTTCCTTGAATGGAAATATGTTTACAGTGGCTGCTTAATTGTGACTAACCCATC  
ACATAGAGACTGCTTTGGTAATAGATTGATTCTGAGGGTCTAGGAGAAGGGACACTTCT  
[T, C]  
ATATGGGGAAGACGGGATTAATCCTTGAAAATGATACTGAAGCCAACCTTCTGTACCAGTA  
TAGCAGCTTAGCAGACTTCTATATGATCCATGTAAGGGTCTGTTTGTCTCTGAGATTTT  
GGGTGCCTTCTTAGCCCCCTGAGTGTCTGGGCTTCTTCTGAATCCATAGGGGTGGAGGTG  
AAGGTACCGCCAGCTCTCACCCAACCTCATCCATCCCTGGACAGCAGGGATTCTGCTCATC  
ACCTTGGTGCCTCCGATGCCTGAAGCACAATAGGCCCTCAGCAAACATTTGTTGAATTCA

47668 GAGTTCCTTGAATGGAAATATGTTTACAGTGGCTGCTTAATTGTGACTAACCCATCACAT  
AGAGACTGCTTTGGTAATAGATTGATTCTGAGGGTCTAGGAGAAGGGACACTTCTCATA  
TGGGGAAGACGGGATTAATCCTTGAAAATGATACTGAAGCCAACCTTCTGTACCAGTATAG  
CAGCTTAGCAGACTTCTATATGATCCATGTAAGGGTCTGTTTGTCTCTGAGATTTTGGG  
TGCCTTCTTAGCCCCCTGAGTGTCTGGGCTTCTTCTGAATTCATAGGGGTGGAGGTGAAG  
[G, A]  
TACCGCCAGCTCTCACCCAACCTCATCCATCCCTGGACAGCAGGGATTCTGCTCATCACCT  
TGGTGCCTCCGATGCCTGAAGCACAATAGGCCCTCAGCAAACATTTGTTGAATTCATGCC  
ATGAACATTAATCGAGCCCTTTTTATACACTGTGCACTGGGATTGGGACCATGGAAAATT  
TAGAGAGGAAAAGGTCCACCTTCAAGGGGCATCTAGAGGAACTTATCCTCTAGCAGGAGA  
AATTGCTAATGAGAAAAGGTATTTTGGGGAGTGGAGTGAGGTGTTGGTCTAGCTGGCAGG

47698 GGCTGCTTAATTGTGACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTTGATTCT  
GAGGGTCTAGGAGAAGGGACACTTCTCATATGGGAAGACGGGATTAATCCTTGAAAATG  
ATACTGAAGCCAACTTCTGTACCACTATAGCAGCTTAGCAGACTTATATGATCCATGT  
AAGGGTCTGTTTGTCTCTGAGATTTTGGGTGCCTTCTCTAGCCCTGAGTGTGGGCTT  
CTTCTGAATTCATAGGGGTGGAGGTGAAGGTACCGCCAGCTCTCACCCAACATCCAT  
[C, T]  
CCTGGACAGCAGGGATTCTGCTCATCACCTTGGTGCCTCCGATGCCTGAAGCACAAATAGG  
CCCTCAGCAAACATTTGTTGAATTCATGCCATGAACATTAATCGAGCCCTTTTTATACAC  
TGTGCACTGGGATTGGGACCATGGAAAATTTAGAGAGGAAAAGGTCCACCTTCAAGGGGC  
ATCTAGAGGAACTTATCCTCTAGCAGGAGAAATTGCTAATGAGAAAAGGTATTTTGGGGA  
GTGGAGTGAGGTGTTGGTCTAGCTGGCAGGTTACGCTATGCTCAGTGGCTCTCTGGTAT

48029 TGGTGCCTCCGATGCCTGAAGCACAATAGGCCCTCAGCAAACATTTGTTGAATTCATGCC  
ATGAACATTAATCGAGCCCTTTTTATACACTGTGCACTGGGATTGGGACCATGGAAAAT  
TAGAGAGGAAAAGGTCCACCTTCAAGGGGCATCTAGAGGAACTTATCCTCTAGCAGGAGA  
AATTGCTAATGAGAAAAGGTATTTTGGGGAGTGGAGTGGGTGTTGGTCTAGCTGGCAGG  
TTCAGCCTATGCTCAGTGGCTCTCTGGTATGGAAAATTCCTCAGAAATGTTGATTACGCCA  
[A, T]  
AGATTTCTCTGGCAGCACTGACTCTTGCCCTTCCCTCGGCCACATTTTATCCCCAAACCT  
AGGTGTTACTGGGAAGAGACTGAGCTGTTTTATTGAAGATAATTGACTTTCCAGTTTTT  
AAGTAAGTCTGTTGATTCTCGAAGACTTCACTAATCAGAGTTATGAATATTTCAAAAAC  
ACTTCCAGTCTTCAGATGAATGGATTTGTAGGTTTTCTACATTGCTGTCTCCCTAGCCC  
CATGAGGAATAATGTGGGTATCCTTTTCCCTTTTAGGTTTCTCTCTTCTCTAACCTGCG

49334 TGAGGCTGCCTGGTTTCTGTAGCAGTGTTTACGAGCCTGTGACTCTGAGCAGAGAGAAGG  
AATATTATACAGGATATTTCCAGGTAGCTCCAGGAAAAGACAAAAGGGGAGGAAGTTGA  
GTCTGTTAGCTAAAGAGCAGTGTTGAATATGGGATCCAAGTTGGGTGGAGAAGAGAAAGA  
GAACACAGGGAGGGTAGGATGACAGGAGAAAGTAGAGGCAGGGTATGATGTGGGAGCGAT  
GAGGGTAGCAAGCTGGAAAGAGAGGATGATCTAGTCAATGTCTTAGTGTGCCTTAGGGCT  
[A, G]  
CTATAATGAAATACCATAGACTGAGTAGCTTTTGACACAACAGAAATTTATTTCTCATGGT  
TCTGGAGGCTGGGAAGATCAAGATATCAAGGCAGATTCAGTGTCTGGCAAGGATCTGGTA  
CCTGATTGACAGACAGCTGTCTTCCCTGCTGTGTCTCACTCGGTGGAAGGACCAAGAGAT  
CTCTCTGGGTTCTCTTTTATAAGGGCATGAATCCAATTCATGAGGGCTCAGCCCTCACCA  
TCTAATCACCCCCCAAAGCCCCCACCTCCTAATCCCATCACATTGAGGGTTAGATTTAG

49680 TTTATTTCTCATGGTTCTGGAGGCTGGGAAGATCAAGATATCAAGGCAGATTCAGTGTCT  
GGCAAGGATCTGGTACCTGATTGACAGACAGCTGTCTTCTGCTGTGTCTCACTCGGTG  
GAAGGACCAAGAGATCTCTCTGGGTTCTCTTTTATAAGGGCATGAATCCAATTCATGAGG  
GCTCAGCCCTCACCATCTAATCACCCCCCAAAGCCCCCACCTCCTAATCCCATCACATTG  
AGGGTTAGATTTAGTGTGTGAATTTTGGGGGACAAAAATTCAGACCGTAGCAGTAAT  
[C, G]  
GCTTCAACTGAGTATTGAGACAGTTCTTGTGGTAACAAGGTTTAGGGTGTGGCCATAGGG  
AGACTCAGCTGTAGTGGAGCTGTTGGGGCTGTGCCAAGGTACCCAGATCCGTTTTGTTC  
TGTGCACCTGTCTTTAGCTTCTGGGGCTTCTCTCTTCTGGCCTGTACCTACAGCCTT  
TTTCAGAGGACTCTCCTTGGTCTACCGGAGCCTATTTTCAGGATGTTCTTAGGAGTTTTT  
TGAGATGGAGTCTCCCTCTGTGCGCCAGGCTGGAGTGCAGCGGCACAAATCTCAGTCACT

50056 GGAGCTGTTGGGGCTGTGCCAAGGTACCCAGATCCGTTTTGTTCTGTGCACCTGTCTTT  
TAGCTTCTGGGGCTTCTCTCTTTTCTGGCCTGTACCTACAGCCTTTTTCAGAGGACTCTC  
CTTGGTCTACCGGAGCCTATTTTCAGGATGTTCTTAGGAGTTTTTTGAGATGGAGTCTCC  
CTCTGTGCGCCAGGCTGGAGTGCAGCGGCACAATCTCAGCTCACTCCAACCTCCACCTCC  
TAGGTTCAAGCCATTCTCCAGCCTCAGCCTCCCAAGTAGCTTAGATTACAAGCATGCACC  
[A, G]  
CTATGCCTGGCTAATTTTTTTTTTTTTTTTTTTTTTTTGTATTTTTCAGAGAGCTGGGACT  
TCGCCATGTTGGCCAGGCTGGTCTCAAACTCCTGACCTCAGGTGATCCCCTGCCTCGGCC  
TCACAAAGTGCTGGGATGACAAGCATGAGCCACTGCGCCTGGCCATCCTAGGAGTTTGTA  
TCACCCACTCCTTACGGTTTGTCTGGAGGGATCTCTAAATAAATAACTCACAAACAAA  
TTCTCATCCGGGATCTGCTTCTGGGATACCTGCCCTGAGTTAGTGGTTGAGATGGAATGG

51020 AGGGGCCCTGAAGAGGCTGGGGGCATGAGGGAGTCTTCAGATCTTCAGCAGGGGGCCCTG  
AGGCATCTTTGGAATGGTTTGGGGTAGGGGTGAGGGGAAGGTTGGATCAGAGGGGAGGAG  
GCTGAGAGCAGAAGAGAGAAACAAAGTACACCAAGTGGCCTCACTGGCCTCACACTTCTC

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AGAATTGGTCCCTTCAGACCCGGTGGTGGGTGGCTTGGCAGCCTGGATGTGGGGTGTGGA  
GATTGGTACTACTCTGGCACACAGGGGGCATGCATTGGTTGAATAAAACAAATGAATGAC  
[A, T, G, C]

CATCAAGTTTGTAGATGCCCCACCTTTTCATCATTCTGAACCATTGTCACTTCCATGTAT  
TTTATGGTCTGATAAATATGGAATTAATCGAAGTACCTCTAGCTATTTGTTATCACCATT  
ATTGGGTGGGACACAGCGAACAGATTCTTAAAGCTAGGGAATTATGCAATAGGACATGT  
TACGGACTTAAGCCATAAGATCCTTTTTTTTTTTTTTTTTTTTTTTTAGATAGA  
GTCTCACTCTGTCAACCAGGCTAAAGTGCAGTGGTGAATGTCGACTCACTGCAACCTCC

53750 ATGTCTTTCTGTCCCCACACCTCTGTCAAACACAGCATCTGCACGCTTTGTTGCATTTG  
CTTGCATAGAACCGTAGTTTTCTTCACCTCCTAATAATGTGGACAGCTCACGTTGATTG  
AGGACTTGCTTTGAACAAGGCATTGAGCAACATGCCGTACATTTTATGTTAAATCTTCCC  
AATAGTGCTACTGCTTCTGTCCCTTCCAGGGAGGAGGAAGGAGGCTTGGAGAAGGGACT  
GTCTTTTAGGAGCCCTGCCAGTGTTCCTGTGGAGGGTGGGGCCATCGTGGAAGACAGA  
[G, T, C]

CTATGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCTTCTTCTCTAACC  
CCTGATAACCTTGTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTGACTTTTTTTTTT  
TTTTTTGCCATACCTTTGGTTTATAAATACAAGAAGAGATTGGGGGAAAATCAGGGGAA  
ACTGTCGAGCTTACAAGTCCCGAGAAGGAAGTCACTGCTCCTTTAAGTCTCATGTGAACC  
CCTTGTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTTTTGGGTCTCA

53753 TCTTCTGTCCCCACACCTCTGTCAAACACAGCATCTGCACGCTTTGTTGCATTGCTT  
GCATAGAACACGTAGTTTTCTTCACCTCCTAATAATGTGGACAGCTCACGTTGATTGAGG  
ACTTGCTTTGAACAAGGCATTGAGCAACATGCCGTACATTTTATGTTAAATCTTCCCAAT  
AGTGCTACTGCTTCTGTCCCTTCCAGGGAGGAGGAAGGAGGCTTGGAGAAGGGACTGTC  
TTTTAGGAGCCCTGCCAGTGTTCCTGTGGAGGGTGGGGCCATCGTGGAAGACAGACCT  
[A, T, C, G]

TGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCTTCTTCTCTAACCCT  
GATAACCTTGTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTGACTTTTTTTTTTTT  
TTTGGCCATACCTTTGGTTTATAAATACAAGAAGAGATTGGGGGAAAATCAGGGGAACT  
GTCGAGCTTACAAGTCCCGAGAAGGAAGTCACTGCTCCTTTAAGTCTCATGTGAACCCCT  
TGTTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTTTTGGGTCTCAAA

53799 TGTGTCATTGCTTGCATAGAACCGTAGTTTTCTTCACCTCCTAATAATGTGGACAGCT  
CACGTTGATTGAGGACTTGCTTTGAACAAGGCATTGAGCAACATGCCGTACATTTTATGT  
TAAATCTTCCCAATAGTGCTACTGCTTCTGTCCCTTCCAGGGAGGAGGAAGGAGGCTTG  
GAGAAGGGACTGTCTTTTAGGAGCCCTGCCAGTGTTCCTGTGGAGGGTGGGGCCATCG  
TGGAAGACAGACCTATGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCT  
[C, A, T]

CTTCTCTAACCCTGATAACCTTGTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTG  
ACTTTTTTTTTTTTTTTTGGCCATACCTTTGGTTTATAAATACAAGAAGAGATTGGGGGAA  
AATCAGGGGAACTGTGAGCTTACAAGTCCCGAGAAGGAAGTCACTGCTCCTTTAAGTC  
TCACTGTAACCCCTTGTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTT  
TTGGGTCTCAAATCACAGTTTATGCAGTTTGGCCCCAGTCAGAGGGACCCCAGGAAGGC

53917 GTTAAATCTTCCCAATAGTGCTACTGCTTCTGTCCCTTCCAGGGAGGAGGAAGGAGCT  
TGGAGAAGGGACTGTCTTTTAGGAGCCCTGCCAGTGTTCCTGTGGAGGGTGGGGCCAT  
CGTGGAAGACAGACCTATGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCC  
CTTCTTCTCTAACCCTGATAACCTTGTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTT  
CTGACTTTTTTTTTTTTTTTGGCCATACCTTTGGTTTATAAATACAAGAAGAGATTGGGG  
[C, T, G]

AAAATCAGGGGAACTGTGAGCTTACAAGTCCCGAGAAGGAAGTCACTGCTCCTTTAAG  
TCTCATGTGAACCCCTTGTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTC  
TTTTGGGTCTCAAATCACAGTTTATGCAGTTTGGCCCCAGTCAGAGGGACCCCAGGAAG  
GCAGACTCAGGGTAAATCTGCCTGTCTCCACCAGAGAGGGGACTACCAAGTGTGACT  
CATGCCATTCAATAGAATTTTAAATCTCACAGTATTTTGTACCCCTGAGTAAAGAG

54056 GTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCTTCTTCTCTAACCCTGA  
TAACCTTGTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTGACTTTTTTTTTTTTTT  
TGCCATACCTTTGGTTTATAAATACAAGAAGAGATTGGGGGAAAATCAGGGGAACTGT  
CGAGCTTACAAGTCCCGAGAAGGAAGTCACTGCTCCTTTAAGTCTCATGTGAACCCCTTG  
TTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTTTTGGGTCTCAAATCA  
[C, T]

FIGURE 3, page 74 of 107

AGTTTATGCAGTTTGGCCCCAGTCAGAGGGACCCAGGAAGGCAGACTCAGGGTAAATTC  
TGCTGTCTTCCACCAGAGAGGGGACTCACCAAGTGTGACTCATGCCATTCAATAGAATT  
TTTAAATCTCACAGTATTTTGTACCCCTGAGTAAAAGAGAGGCTTGTAGCTCTTCATG  
AAGGAACAAGAAAGGCCGAACAGTGTGTTGGAGCCAGTGAAGTAAATACTGCCCTG  
TCTCTGTCTGTCCACTCTAGCGCTTGTACAAACCATGAAGAACTCTCTTGGACTGTTT

54402 ACTCAGGGTAAATTCAGCTGTCTTCCACCAGAGAGGGGACTCACCAAGTGTGACTCATG  
CCATTCAATAGAATTTTTAAATCTCACAGTATTTTGTACCCCTGAGTAAAAGAGAGGC  
TTGTAGCTCTTCATGAAGGAACAAGAAAGGCCGAACAGTGTGTTGGAGCCAGTGAAG  
TAAATACTGCCCTGTCTCTGTCTGTCCACTCTAGCGCTTGTACAAACCATGAAGAACT  
CTCTTGGACTGTTTGTCTTTTGAAGATGTTAACACCTTGACTCTGGATTTCTGCCTATG  
[G, A]  
GAAAAACCAATAGTGCCAGGGGTGCTTCCATATGCAGGATTAACCTCTGCAGTCAAAG  
TTTCTGTTGGGCAGGTGTGTGAACCTTGATATCATAAATGCTGGCCCAAAGCAAATGGGAG  
AATGGATGAATGAACAAATTCAGGAATGAAACAACTGTAACCAGGGGTCTCCTAGTTGT  
AGGTTCTCTGCTAACTTCATATTGAGACACAAAGGAAGGGCATCTTATAATATAATGTT  
GGGGATGAGCAGTCAGCTTGAGGTGGGGACAGTAAGGTGGGTTTGTATGTTTGAGAA

54493 TATTTTGTACCCCTGAGTAAAAGAGAGGCTTGTAGCTCTTCATGAAGGAACAAGAAAGGC  
CCGAAGTGAAGTGTGTTGGAGCCAGTGAAGTAAATACTGCCCTGTCTTGTCTGTCCAC  
TCTAGCGCTTGTACAAACCATGAAGAACTCTCTTGGACTGTTTGTCTTTTGAAGATGTT  
AACACCTTGACTCTGGATTTCTGCCTATGGGAAAAACCAATAGTGCCAGGGGTGCTT  
CCATATGCAGGATTAACCTCTGCAGTCAAAGTTTCTGTTGGGCAGGTGTGTGAACCTGATA  
[G, A, T]  
CATAAATGCTGGCCCAAAGCAAATGGGAGAATGGATGAATGAACAAATTCAGGAATGAAA  
CAAAGTGAACAGGGGTCTCCTAGTTGTAGGTTCTCTGCTAACTTCATATTGAGACAC  
AAAGGAAGGGCATCTTATAATATAATGTTGGGGGATGAGCAGTCAGCTTGGAGGTGGGA  
CACGTAAGGTGGGTTTGTATGTTTGAAGGAATTGACCAAAAAAGAGTCAAGAGGTGA  
GAAGAATCTGGGAAGTGAGACCTGTTTCTCTGGGACAGGTGTGAGCGGTCTGGGTGCTG

54749 CTCTGCAGTCAAAGTTTCTGTTGGGCAGGTGTGTGAACCTTGATATCATAAATGCTGGCC  
AAAGCAAATGGGAGAATGGATGAATGAACAAATTCAGGAATGAACAACTGTAACCAGG  
GGTCTCCTAGTTGTAGGTTCTCTGTAACTTCATATTGAGACACAAAGGAAGGGCATCT  
TATAATATAATGTTGGGGGATGAGCAGTCAGCTTGGAGGTGGGGACCGTAAGGTGGGTT  
TTGATGTTTGAAGGAATTGACCAAAAAAGAGTCAAGAGGTGAGAAGAATCTGGGAAG  
[T, C]  
GAGACCTGTTTCTCTGGGACAGGTGTGAGCGGGTCTGGGTGCTGCTGGGTTTGGCTGGGG  
CAAAGGTTGCTTGTGGGGGCGTGGCAGTGGGTGAGGCTGTGAGATAGGCAGGCGCCAGG  
TCCTGGAAGGGAGAGTCAGGGAGCAAGGCATGGAGCCTGCACCTTTACTCTGAATGTTGGT  
GGCGCTTCAGAGCATGTTAGCAGGGGTCCATGTGATCACACTGACACCTGAGAGAGTG  
ACACACCATGTACATGGCTGGTATATGGAGGATGGATTTAAGGGGGACAGGACTGAAGGC

55396 GACAGGAAAGCACAGATGTGAGATGAGGTGGCAGGCAGTTCTAGCTCCCTCTTCCCCCA  
GTCTGCCTTGTCTTCTCTCATGGCTCCATAGGGTCTCAGTCATTTTCATCATAGCTT  
GATCTCTTCCATCTGGAAGTGCAGCCTGAAATTTTGAAGACAGCAGGGAGCAATGCTTCA  
CCCAAGGGAGAGCCTCGGGTGGCGTTTGGGACCATGGCTTGTCTCTTAGTGATACACA  
GACTTAGTGTTACTGCCATTCTTACTGGGATCAGCTTGATTGCCTTTAAGGTAGGGCTGT  
[-, C]  
CATGGAAACAGGGAAAACATGATTTGGTTGTTTGGGTATCTGGAACCAGAGGCAGCACAG  
ATACTGCTCTAAGAGCTGCTGGGACAACTGGAGGCCGCTGTGGGTGGAGCACCCGAGGTG  
GAATCCTGCGCTCCTCATCTTCTGCCCCTCTTCTAACACCCCTCCCTCCCCAGCGGCCT  
GAAGTCTGCCTATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAG  
CCATCAGTGCAGGTGGCCCCGAATGATTCCAGACCTAGAGTAGGGGTGGGAGGTGGCT

55397 ACAGGAAAGCACAGATGTGAGATGAGGTGGCAGGCAGTTCTAGCTCCCTCTTCCCCCAG  
TCTGCCCTGTTTTCTCTCTCATGGCTCCATAGGGTCTCAGTCATTTTCATCATAGCTTG  
ATCTCTTCCATCTGGAAGTGCAGCCTGAAATTTTGAAGACAGCAGGGAGCAATGCTTCA  
CCAAAGGGAGAGCCTCGGGTGGCGTTTGGGACCATGGCTTGTCTCTTAGTGATACAG  
ACTTAGTGTTACTGCCATTCTTACTGGGATCAGCTTGATTGCCTTTAAGGTAGGGCTGT  
[-, C]  
ATGGAAACAGGGAAAACATGATTTGGTTGTTTGGGTATCTGGAACCAGAGGCAGCACAGA  
TACTGCTCTAAGAGCTGCTGGGACAACTGGAGGCCGCTGTGGGTGGAGCACCCGAGGTGG  
AATCCTGCGCTCCTCATCTTCTGCCCCTCTTCTAACACCCCTCCCTCCCCAGCGGCCTG

FIGURE 3, page 75 of 107

AAGTCTGCCTATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAGC  
CATCAGTGCAGGTGGCCCCGGAATGATTCCAGACCTAGAGTAGGGGTGGGAGGTCGGCTG

55703 AACAGGGAAAACATGATTTGGTTGTTTGGGTATCTGGAACCAGAGGCAGCACAGATACTG  
CTCTAAGAGCTGCTGGGACAACCTGGAGGCCGGTGTGGGTGGAGCACCCGAGGTGGAATCC  
TGCGCTCCTCATCTTTCCTGCCCTCTTCTAACACCCTCCCTCCCCAGCGGCTGAAGTC  
TGCCTATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAGCCATCA  
GTGCAGGTGGCCCCGGAATGATTCCAGACCTAGAGTAGGGGTGGGAGGTCGGCTGCGGGG  
[A, C]  
GGGGGGAGGTGAGAGGAGGCTGTCTTTCCTCTTGCCCGGAGTCTGCAGTCACAGTTG  
CACTTTCCTGGGTGAGTAGCAGAGTCACGCTGCTGTGTGACAGTGGCACTGAGGCAGCT  
GCATTTTCAGGTTTCCAAGAGACTCTGAACCCTTGAATGCCATTTGTTTCAGGTGACATG  
GAGGAATGGAGGCACTCGGGTTAAGTGTCTGAAGATGGATTCAAGGATGCCCCCTGCTTGT  
TAGCTTGTATAGGTTGCTCAGTGTCCCCTCTCTGGCCCGTAGTTTCTCATCTATCAAT

55783 ACTGGAGGCCGGTGTGGGTGGAGCACCCGAGGTGGAATCCTGCGCTCCTCATCTTTCCTG  
CCCTCTTCTTAACACCCTCCCTCCCCAGCGGCTGAAGTCTGCCTATGCCTATGCAGGCT  
GAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAGCCATCAGTGCAGGTGGCCCCGGAATG  
ATTCCAGACCTAGAGTAGGGGTGGGAGGTCGGCTGCGGGCGGGGGAGGTGAGAGGAGG  
CTGTCTTTCCTCTTGCCCGGAGTCTGCAGTCACAGTTGCATTTGCCTGGGTGAGTA  
[G, A]  
CAGAGTCACGCTGCTGTGTGACAGTGGCACTGAGGCAGCTGCATTTTCAGGTTTCCAAGAG  
ACTCTGAACCCTTGAATGCCATTTGTTTCAGGTGACATGGAGGAATGGAGGCACTCGGG  
TTAAGTGTCTGAAGATGGATTCAAGGATGCCCCCTGCTTGTAGCTTGTATAGGTTGCTC  
AGTGTCCCCTCTCTGGCCCGTAGTTTCTCATCTATCAATGGGGGCAGATAATAATCATC  
ACCTTACACAGAAGGTTTGGCGAAGATAAAAACAGGTTCACTGGCTGGGTGCAGTGGCTC

55806 CACCCGAGGTGGAATCCTGCGCTCCTCATCTTTCCTGCCCTCTTCTTAACACCCTCCCTC  
CCCAGCGGCCCTGAAGTCTGCCTATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTG  
GAAGCTCTGAGCCATCAGTGCAGGTGGCCCCGGAATGATTCCAGACCTAGAGTAGGGGTG  
GGAGGTGCGCTGCGGGCGGGGGAGGTGAGAGGAGGCTGTCTTTCCTCTTGCCCGGG  
AGTCTGCAGTCACAGTTGCATTTGCCTGGGTGAGTAGCAGAGTCACGCTGCTGTGTGAC  
[A, C]  
GTGGCACTGAGGCAGCTGCATTTTCAGGTTTCCAAGAGACTCTGAACCCTTGAATGCCAT  
TTGTTTCAGGTGACATGGAGGAATGGAGGCACTCGGGTTAAGTGTCTGAAGATGGATTCA  
AGGATGCCCCCTGCTTGTAGCTTGTATAGGTTGCTCAGTGTCCCCTCTCTGGCCCGTAG  
TTTCTCATCTATCAATGGGGGCAGATAATAATCATCACCTTACACAGAAGGTTTGGCGA  
AGATAAAAACAGGTTCACTGGCTGGGTGCAGTGGCTCATACTTGTAAATCCAGCACTTTA

57433 GAAGTAGTCAATCTCATAGACTGGAAAATATTTTAAATGCCTATTTGAAACAAATGTCGT  
TCCTATTTTTTGGGATAAAAGGGCCCTTTCCCCCTGGAATTGCTATGTTTCCTCTTTTCC  
TGTTCTACACTCTGCAGAACTGACTTTGAAGTCAGATGATTTCCCTTTTAAATCTGGCTT  
CTCGCTTTTGGGCCGCTTAACCTTGACTTAGCCATTGAACCTGTCTGGGTCTCAGTTTCT  
TTGTCTGTGAAGTGGGGCTGTGTTGGGCATGAGCATGCGCCTACAGGCCTCTAACTGGAG  
[G, T]  
GGGTGTTGGTGATCAGGGCCCTGGCTGCTGCCCTGATCTCCACAGCTGGGCTTGCACTGC  
GGGTACGTTGCTCCCGGGCTGCTCCAGCCAGTGTCTGTGCGCAGCAAGGATACCACGGC  
AGGATTGTTTCTGGGAGACACAGGACTCCTCAGACAGCTAACTTCAGCTCAAGAACTCCT  
TGATGGGCTTGCTAAACTTCCTTAGGCTGGAAGATGCTTACCTCCTCCTTCTTCTTTCC  
TTCTTTTCCAGGGTCAGACTTACTTAGAGTCTAGTGGCTGTTCTAGCCTCCCCAACTC

57699 GCATGAGCATGCGCCTACAGGCCTCTAACTGGAGGGGTGTTGGTGATCAGGGCCCTGGC  
TGCTGCCCTGATCTCCACAGCTGGGCTTGCACTGCGGTACGTTGCTCCCGGGCTGCTCC  
CAGCCAGTGTCTGTGCGCAGCAAGGATACCACGGCAGGATTGTTTCTGGGAGACACAGGA  
CTCCTCAGACAGCTAACTTCAGCTCAAGAACTCCTTGATGGGCTTGCTAAACTTCCTTAG  
GCTGGAAGATGCTTACCTCCTCCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT  
[T, A]  
TAGAGTCTAGTGGCTGTTCTAGCCTCCCCAACTCCCTATCATTTTCTCTCACACATGCGT  
TCCCCCTAATAAAATCCATGCACATTTAATCCCTTCTTGGCATCTGCTTCTGGGGTCTCT  
ACCTGGACTCATGCAGTGTGATAATTCCTTGTAGTGAGGACCGAATGTAGTGATGTAAGC  
AGAGTGTGTTGTCAGAGTGACAGCATGAGTAAGTGCCAGTAGGCCATCAGGGCTCCTGTC  
ACCTTACCACCATCAGCACCACCATCCTCATCACCATCTGGCCAAAGTTTGCTTCTTGTG

FIGURE 3, page 76 of 107

60173 TTAATGGACTCACAGTTCCATATGGCTAGGGAGGCCTCACAATCATGGTGGAGGGTAAAT  
GAGGAGCAAAGTCACATCTTACATGGCAGCAGGCAAGAGAGCATGTGCAAGGGAACCCAC  
CTTTATAAAACCATCAGATCTTGTGAGACTTATCTACTATCACGAGAACAGCACGGGGAA  
AAACCTGCCCCCATGCTTCAATTACCTCCCACGGGGTCACTCCCCAAGATGTAAGGATT  
ATGGGAATACAATTAAAGGTGAGATTGGGTGGGGACACAGCCAAACCATATCAGGAAAT  
[C, G, A, T]  
TGAACATAATGGAGGGCAGATTTCATTTCCTGGGGCTTCCGTAGCAAATTGCCACACATGTA  
GTGGCTTAAAGCAGCACTAATTTATTATTGTATGGTTCTGGAAGTCAGAAGTTCAAATC  
AGCCTCACTTGGCCAAAATCAAAGAGTAAGCAGTACAGGTTCTTCGGGAGGCTCTAGGG  
GAGGATCCTTCCCTTGCCCTTTTCCAGCTTCTAGAGGGACCACATTCTGGGCTCATGGCT  
GCATCACTCCAACCTGTGTATCTGTCTCACATCCCTTCTCTCTGCCCCCTCCTGCTTC

62216 CACATTGTTTTCAACAAGGAAGCTAAGGGAGGAGGTGAATTATAAATGGCAGAGAGATAGC  
TTTTCAATTTGGACCTCGTAGAAAAATGTAAGTATTTCAAACCTCAGTTTATACTTTTTTT  
TTTTTTAAACTGGGACCCCTGGTGCTTATTTTTTTAGAACTCAAATGGGTACCTAGCAACT  
GATCAAATCCCTAACTGCAGGCTTGGTGAACCAGCGTTTCATCCTCACATTTGAAAGCT  
GGCTCAAAGAAGACATCTGTGCTTTGTTTCTGACAGTTCCTGATTATTTATAAACAAA  
[C, A]  
TCTCTTCTTCTTTGTCCCCACCCTGACTCCTCAGTGGCCGTTCCCGCAGCAGCACCCGGT  
GTGCCAGCCCAAGAGCGCCACTAACGGGCAACCCCGGCTCCGGCTCCGACTCCAATCC  
GCGCTGTCCATTTCTCCCGAGCCACAGTGGTAGCCAGGATGGAAGGCACCTCCCAAGG  
GGGCTTGACAGCCGTCATGAAGTGGAAGACGGTGGTTGCCATCTTTGTGGTTGTGGTGGT  
CTACCTTGTCACTGGCGGTCTTGTCTTCCGGGCATTGGAGCAGCCCTTTGAGAGCAGCCA

62830 GCCTTGAGAAGGCGGAATTCTGCGGGATCATGTCTGTGTGAGCCCCAGGAGCTGGAG  
ACGTTGATCCAGGTGAGCAGGGAGTGAGTCCATCTTAGGCCAGCTGGTGGGGTGGATGGC  
AGTGTGGTTTTATCTTTCTGGGTCTCTAGTCTTGCCCTCAGTTGAGAGGCTCTTGGTGG  
TCAGGGAAGTTCTCTCCAGGGAGGTGACATGTGAGCTGAGACCTCCAAGAAGCGATAGTG  
AGGCATGTGACAGTGTGGGGGAAGGAGGGTCCATGTTCTGCATCTGGTTTTGGATGAGTG  
[G, C]  
TCAGAGGCGGCAGCAGGCCAATGGACTTTGGATTTCAGTTCAAGTCCACCTATGTGTG  
CTGATTAACCTCCTTGATTCTGAACTCTGTGGAATGCTGGGATAGAACCCGAAGAAGGAAA  
GAATTTTAAATATGCAGATTTAGAATAAGCAGGGATATATTAACCTGTCCAAGGTCCATG  
AGGATGAGGTAGAGAAGAGGCCACCAGGTATGTGGGTGAAGAGGCTGTCAGTGGCCTGAG  
ACAGCTGTTATAGTGGATTTATGGGGATGAAATAATATGGATCACAGTAGTAGTAATCAT

63395 GGATGAAATAATATGGATCACAGTAGTAGTAATCATCAGGTTTGCTGTTTTTGAATACTT  
ACTGTGTATCAGGCACTGTACTAAGGCCTTTACATACCCTGGATATTAAGGAAAAAAGAT  
TCTTAGGAAAATGGAAGCAGAGAAGTGAAGTGCAGCCTAAAGAAGCAAGGCAACACTTC  
TGGGCGACAGATGTGCACTTGGCAGGGGTGGACTGTGGCGGTAAAGAGCTATAGGAAAGC  
CAGAGAGTCATCTGTGGGGCTGCGGTGCGAGGGACTGGATCAGGAGGGTTGTGAAGTCTG  
[G, A]  
GAAGCCAGAGAGAAAAGCAGTTCCACGAGGAAGAAAGGGAATGGTGGAGAGCCCTGTT  
GGAGGGCTTACCTTGGACGTGAAGGAGGAAGGCTGCCTCTGAGGCTGAAGTTCCACTTT  
CTATCCAGACACCCCTCCTGAAGTACAAAGAGTGGGTTTTGGTGAAGGCGGTGACATTT  
ATGGAGGTGAGGGAGAGTCTCATCTTTCTGGGGGCTCTAAAGTTTGAAGGTGGAGGGAT  
GGAAAGACAGCTTTTACAATTCCCTTGGCTCTGGAAGATGCACATTAAATTCTAATGG

64019 GGATTTACCAGTCTGCGCTGTTTTCTTATTTATTTATTTCTTACCATACCAATAGAGTAG  
GGGAATTCTGATGCTGCTTATGATCTGGCACCTTCATAGCAATCATATTCTTGTCAGTTA  
GTTTTAATAATGACTTGACTCTTAAATAAATAGAAATACAAATTCTTCCCTTCTGGGAG  
TAAATATGATTTATAGCTATGCCCTATAATTCTTCTCAAAAAAATAAAATGTTAAAAAT  
CCAAGGGCAGCATTTATATAAGTGTTCATAGGAAGTCAGTTCTCCAAATGGCTTTGTG  
[T, -]  
TTTTTTTTTTTCTTTTCTTTTTTGGAGACAGGGTCTCATTCTGTCACTTAGGCTGGAGTG  
CAGTGGTGTGATCATGGCTCATTGCAGGTTCAACTTCCTGATCGAGGTATCAGCTGATCC  
TTCTGCCTCAGTCTCCTGAGTAGCTGGGACTACAGGCATGTGCCACCATGCCTGGCTACT  
TTTTGCATTTTTTTGTAGAGACAGGTTTTTACCATGTTGCCAGGCTGGTCTTGAATTCC  
TAGGCTCAAGCAATCAACCCGCTTGGCCTCCTAAAGTGTGGGATTACAGGTGTGAGTC

64030 TCTGCGCTGTTTTCTTATTTATTTATTTCTTACCATACCAATAGAGTAGGGGAATTCTGA  
TGCTGCTTATGATCTGGCACCTTCATAGCAATCATATTCTTGTCAGTTAGTTTTAATAAT  
GACTTGACTCTTAAATAAATAGAAATACAAATTCTTCCCTTCTGGGAGTAAATATGATT

FIGURE 3, page 77 of 107

TCATAGCTATGCCCTATAATTCCTTCTCAAAAAAATAAAATGTTAAAAATCCAAGGGCAGC  
ATTTTCATATAAGTGTTCATAGGAAGTCAGTTCCTCCAAATGGCTTTGTCTTTTTTTTTTTT  
[T, -]

CTTTTTCTTTTTTGTAGACAGGGTCTCATTCTGTCACTTAGGCTGGAGTGCAGTGGTGTGA  
TCATGGCTCATTGCAGGTTCAACTTCCTGATCGAGGTATCAGCTGATCCTTCTGCCTCAG  
TCTCCTGAGTAGCTGGGACTACAGGCATGTGCCACCATGCCTGGCTACTTTTTGCATTTT  
TTTGTAGAGACAGGTTTTACCATGTGCCCAGGCTGGTCTTGAATTCCTAGGCTCAAGC  
AATCAACCCGCCTTGGCCTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCAT

64104

TGGCACCTTCATAGCAATCATATTCTGTGCTAGTATTTAATAATGACTTGACTCTTAA  
ATAAATAGAAATACAAATTCTTCCCTTCCTGGGAGTAAATATGATTTTCATAGCTATGCC  
TATAATTCTTCTCAAAAAAATAAAATGTTAAAAATCCAAGGGCAGCATTTTCATATAAGTG  
TTTCATAGGAAGTCAGTTCCTCCAAATGGCTTTGTCTTTTTTTTTTTTTCTTTTTCTTTTT  
GAGACAGGGTCTCATTCTGTCACTTAGGCTGGAGTGCAGTGGTGTGATCATGGCTCATTG  
[C, A, G, T]  
AGGTTCAACTTCCTGATCGAGGTATCAGCTGATCCTTCTGCCTCAGTCTCCTGAGTAGCT  
GGGACTACAGGCATGTGCCACCATGCCTGGCTACTTTTTGCATTTTTTTGTAGAGACAGG  
TTTTTACCATTGTTGCCAGGCTGGTCTTGAATTCCTAGGCTCAAGCAATCAACCCGCCTT  
GGCCTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCATCCCTTTTCTTCTTT  
CATGGGAAATGCTACCACATTTGTGGTGTGAGATTTTGTACTAATCAGTGCCAGATT

64166

AAATAGAAATACAAATTCTTCCCTTCCTGGGAGTAAATATGATTTTCATAGCTATGCCCTA  
TAATTCCTTCTCAAAAAAATAAAATGTTAAAAATCCAAGGGCAGCATTTTCATATAAGTGT  
TCATAGGAAGTCAGTTCCTCCAAATGGCTTTGTCTTTTTTTTTTTTTCTTTTTCTTTTTTGA  
GACAGGGTCTCATTCTGTCACTTAGGCTGGAGTGCAGTGGTGTGATCATGGCTCATTGCA  
GGTTCAACTTCCTGATCGAGGTATCAGCTGATCCTTCTGCCTCAGTCTCCTGAGTAGCTG  
[G, T]  
GACTACAGGCATGTGCCACCATGCCTGGCTACTTTTTGCATTTTTTTGTAGAGACAGGTT  
TTACCATTGTTGCCAGGCTGGTCTTGAATTCCTAGGCTCAAGCAATCAACCCGCCTTGG  
CCTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCATCCCTTTTCTTCTTTCA  
TGGGAAAATGCTACCACATTTGTGGTGTGAGATTTTGTACTAATCAGTGCCAGATTTA  
AAGCCTAGCATGCTATAGAGAATGGAATAAACAATTCTGGAGTAGTTTAAAGTAGGAGTA

64408

TTCAACTTCCTGATCGAGGTATCAGCTGATCCTTCTGCCTCAGTCTCCTGAGTAGCTGGG  
ACTACAGGCATGTGCCACCATGCCTGGCTACTTTTTGCATTTTTTTGTAGAGACAGGTTT  
TCACCATTGTTGCCAGGCTGGTCTTGAATTCCTAGGCTCAAGCAATCAACCCGCCTTGGC  
CTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCATCCCTTTTCTTCTTTTCA  
GGGAAAATGCTACCACATTTGTGGTGTGAGATTTTGTACTAATCAGTGCCAGATTTAA  
[A, G]  
GCCTAGCATGCTATAGAGAATGGAATAAACAATTCTGGAGTAGTTTAAAGTAGGAGTATA  
ATTACATTTATACACATTGTTGTGATATGAGGTAGGATCCTTTTTAATTAGTTGTAAGAC  
ACGTCATAATAACCTGATAGGCGTTCTGAAGTGAATCTAGTATTGTGTTTGAATTTTCTT  
TCATTAGGCAGTAAGATCTTGAAGAAAAGGAATGCACTGTGTTACCTTTTCTCCACATG  
TGACCTATGCTTTGCTTTGCCTCTAATTATTGCCATTAGATAAATGTTTTTAGAGCAAG

64786

TGTTGTGATATGAGGTAGGATCCTTTTTAATTAGTTGTAAGACACGTCATAATAACCTGA  
TAGGCGTTCTGAAGTGAATCTAGTATTGTGTTTGAATTTTCTTCATTAGGCAGTAAGAT  
CTTGAAGAAAAGGAATGCACTGTGTTACCTTTTCTCCACATGTGACCTATGCTTTGCTT  
TGCTCTAATTATTGCCATTAGATAAATGTTTTTAGAGCAAGATATCAAAGCAAATTGT  
AGAACACTGGTGTATGCACAAGCTATCTGAGCTTATCCATGCATTTGTTGATTAATTCGG  
[C, T]  
ATTTCCGTATTGCCCATTTCTTTAACCCTCATCTTTATGAGAGAGCTCAGAGACCTGAATG  
AAGGACAGGGTCAGAGAGCGTGGAGGTCTTATTCTGATGCTGCCATTAAGACTGGTGTG  
CTGTTTTGACCTCAAAGATTTCTCTGTGAAATGAGATATGTGTGTGTATGTGTGCGTTT  
TGTGAATGTGTTTGACATACACACGTGTGTGCATTTAAGATAATTTTATAACAATTTAA  
AAAGCTGCTCTTTATTAGGCATCTGTTATGAGCTGGGCATCATATACCCATTATCTCATT

65120

TTATGAGAGAGCTCAGAGACCTGAATGAAGGACAGGGTCAGAGAGCGTGGAGGTCTTTAT  
TCTGATGCTGCCATTAAGACTGGTGTCTGTTTTGACCTCAAAGATTTCTCTGTGAATG  
AGATATGTGTGTGTATGTGTGCGTTTGTGTGAATGTGTTTGACATACACACGTGTGTG  
ATTTAAGATAATTTTATAACAATTTAAAAAGCTGCTCTTTATTAGGCATCTGTTATGAGC  
TGGGCATCATATACCCATTATCTCATTTAATCTTATCAACAACACTCTAAGTTTCATATCA  
[A, G, C]



GATTCCCATTTTACAGGGGAGGAAACATCAGTTTCCTTAAAGAGGTGAGTAACTTTCCAA  
CCACCAAAGTGGTAGAGCTGGTAGTCAGCGCAAGGTTGGACTGACTGTACACTCTCTCAT  
CCAAATAGTCTACAGGCCCTTTAAGTAGATCTTGGTTTATAATAAGCTCCAGTCTCTTT  
AAACTTGTGCTTTATGTTGAATGCTGTATTAGTCCATTCTCACTATAAAGAACTATCTGA  
GACTAAGCAATTTATAAAGAAAAGAGGTTTAATTGATTACAGTTCCGCAGGCTGTGCAG

65703 GTTCCGCAGGCTGTGCAGGAAGCATGGCTTGGGAGGCTTCAGGAACTTACAATCATGGC  
AGAAGACGAAGGGGAGGCAGGCATGTCTATATGGCTGGAGCAGGAGGAAGAGAGAGCAA  
AGGGAGGGATGTACACACTTTTAAACAACCATATCTTGGCCTGGCGCGGTGGCTTACAC  
CTGTAATCCCAGCACTTTGGGAGGCCAAGGTGGGTGGATGACCTGAGATCAGGAGTTCGA  
GACCAACCTGGCCAACATGGTGAAACCCCATCTCTACCTAAAATACAAAATTAGCCAGG  
[C, T]  
GTGGTGGTGTGCACCTGTGGTCCCAGCTACTAGGGAGGCTGAGGCAGAAGAATTGCTTGA  
ACCTGGGAGGCAGAGGTTGCAGTGAGCCGAGATCATGCCACTGCACTCCAGCCTAGGCAT  
CAGAGCATGACTCTCTCAAAACAAAAACAAAAACAAAAAGCCAAACAAACAGATTTTCATG  
AGAACTCACTCACTATCACAAGAACAGCAAGAGGGGAAATCTGCCCCACCATAACCCCTTC  
TCCTACACTGGGGATTACAATTCAACATGAGATTGCGGCAGGGACATAAATCCAAACCAT

66930 ATGCCTCTGAGCAGCACTGTATGTAGCGATCACAAGAAACACAGTATTTAAAAATAGTCT  
GTTTTACATCTGGAAGGGTTTTAGTGTGCTGTGTTTAAAGTTGGAAGATAGTACTAT  
TGTAATCTACCCCAAGTCTGAAAGGAGTGACTGGAGAGTAGAAAGTAGATGGAAAGTATTT  
ATTTTCATCATGTCTCTTGGCTGGATTGAGTGAACCCCTCATAAAGCCAAGCTGGAATGTG  
TGCTTCATATTATTAATAACCAAAATAGAGTATCCAGAGAAGCATGATACCCCTCAAAATG  
[C, G]  
CTGGATAGCCTAGAAGAGCCTTAGCTCTTACAGCCATCGTGGGGAGGGATTTTCCAACAA  
GTAAGACCACTTCATGGGGTACTGTGGGACTCCAGAGGAGAGTAATGGGCCACTATCCCT  
AAAGGTGAAGAAAGATGGGTGCTGTATGAAGGGGACATTCTCATCCATTCAATTTAGTC  
ATTCATTCACTATCCATCCATCCACTTGTTCTCAGAATTGCTGCTGAACCTCCTGCATGT  
ATCAGGTAACATGCCAGGTGTTGGGGAGAGAAAGAAGAAGACACGGCCGGGTTTCGGTGGC

66951 TGTAGCGATCACAAGAAACACAGTATTTAAAAATAGTCTGTTTTACATCTGGAAGGGTT  
TTCAGTGTGCTGTGTTTTAAGTTGGAAGATAGTACTATTGTATCTACCCCAAGTCTGAA  
AGGAGTGACTGGAGAGTAGAAAGTAGATGGAAAGTATTTATTTTCATCATGTCTCTTGGCT  
GGATTGAGTGAACCCCTCATAAAGCCAAGCTGGAATGTGTGCTTCATATTATTAATAACC  
AAAAATAGAGTATCCAGAGAAGCATGATACCCCTCAAAATGCCTGGATAGCCTAGAAGAGCC  
[T, G]  
TAGCTCTTACAGCCATCGTGGGGAGGGATTTTCCAACAAGTAAGACCACTTCATGGGGTA  
CTGTGGGACTCCAGAGGAGAGTAATGGGCCACTATCCCTAAAGGTGAAGAAAGATGGGTT  
GCTGTTATGAAGGGGACATTCTCATCCATTCAATTTAGTCATTCAATCATCTATCCATCCA  
TCCACTTGTTCTCAGAATTGCTGTGAACCTCCTGCATGTATCAGGTAACATGCCAGGTGT  
TGGGGAGAGAAAGAAGAAGACACGGCCGGGTTTCGGTGGCTCACGCCGTGAATCCCACCAC

68094 GAGACATTTTTGGTTGTTACAGCTGGGGAGGTGCTATAGACATCTAGTGGGTAGAGGCCA  
GGGTTGCTGCTAGACATCCTACAATGCACAGCATAGACCCCCCTCCACAAAGAATTAT  
CCAGTTCAACATGCTCATAGGTTGAGAAGCACTGGAGGAAGAGGCATGTAAGCCAATAAT  
TACAATCTTTTGAATAGAGCTATCTGAAAGACGTCCAAAAATGGAGCCCTAGTGAGGC  
AAATAGAGCTCAGAGAATATTTTGTGGTTATTTATCTCCTTCAGTCCCCACAGCTGTTCT  
[G, A]  
TGAGGATAATCTTTGGTGCCACATACAGACGAGGAAATGAGGCAGCAGGAGCTGAAATG  
ATGGCTTAAGTTTCACCTGGTTAGAAATGGAGGATCCAGGGTTTACTGCCAGGCAGTCTGA  
CCACATATCCCAGGCTCTGAACCAACCATGCACTGGAACAGAAACACGATATCTGGGAGGG  
ATTCATTGGGTAGGCCATGGTTGGAGGGTATCCCAATGGCTGGCATGTGGCCCATGGGAA  
AATGCTAACAAGTTTGTGGTGACAAGAATGTTATACTAATCAGTTCAGATTTGAGGCAT

68124 GTGCTATAGACATCTAGTGGGTAGAGGCCAGGGTTGCTGCTAGACATCCTACAATGCACA  
GCATAGACCCCCCTCCACAAAGAATTATCCAGTTCAACATGCTCATAGGTTGAGAAGC  
ACTGGAGGAAGAGGCATGTAAGCCAATAATTACAATCTTTTGAATAGAGCTATCTGAAA  
GACGTCCAAAAATGGAGCCCTAGTGAGGCAAATAGAGCTCAGAGAATATTTTGTGGTTA  
TTTATCTCCTTCAGTCCCCACAGCTGTTCTGTGAGGATAATCTTTGGTGCCACATACAG  
[A, G]  
CGAGGAAATGAGGCAGCAGGAGCTGAAATGATGGCTTAAGTTACCTGGTTAGAAATGGA  
GGATCCAGGGTTTACTGCCAGGCAGTCTGACCACATATCCCAGGCTCTGAACCACCATGC  
ACTGGAACAGAAACACGATATCTGGGAGGGATTTCATTGGGTAGGCCATGGTTGGAGGGTA

TCCCAATGGCTGGCATGTGGCCCATGGGAAAATGCTAACAAGTTTGTGGTGACAAGAATG  
TTATACTAATCAGTTCAGATTGAGGCATTGAAAGTGATCAGAATGGCTTGAAC TGAGA

68787 CTTAGAGGACCTTTATGTTGTGGAATGTCGAGTCACTGAAAGCTTTAAGCGAGGCTTGGA  
AGATGGAATTTGGCTGCTGAAAAAACCTTTTAGCAATGAGGAAGTTGGGTTGGAGGAAGG  
AGAAACGGGAAGAAGGAAGACCAGTTAGAATGTTGCAACATCACAGGTGAGGGATGCTGA  
GAGATAGAGAAAAGGCTATATTTAAGAAAGTTGACAGAGAAAACCTTGAAAATTACTCAAA  
CCTGACTCAGCAAAGATTTCTGCTATGTGCTGCATATCCCTGCATGGCCTGTAGCCCCCA  
[A, G]  
GACTCGGGGGTTAATCTCCCCACGTTAAATCCTATACCACTTAATGAGCTGAGTGAATTG  
GGCAAATATCATGTTGCCCCGGCCTCACTGCTCTTCTGTGAAATGGAGATTGCGATCACG  
GTGTCTACCTGTTAGACACTATGGTGGTCTGAGGATTAACAAAAGAAGCTCAGTAACTT  
TGAGCTCTTGTTATTGCTGCTGCTTATTTGTTAGGGAAGGAAGAAAAAAGAAACCAGAA  
AACTCCTAACTGATGCGCATCGTGGAGTTCTGCTGAGGGAAGAGAAGAAGGTGTCTGA

69668 CACTGATCTCTCTCCCCGCTGCTTCTCTGGTTTGAGGCACAGTTTCAGAGAACCCTGAGGG  
ACCCGGTGGGCTCAGGCGGCCTCAAAGCAGCAGGTACCTGACCAGTGAGTGACCACAG  
ATTCCAAGGTGTGACCGAGTGAAAGGGCTTATATCCCAATGCCTGACTGCAGTTAAACC  
CTAATGAGGTATGTGGATCTTCTAGAGGAAGGGCCAGGCCCTTTAATAAGGACCCTTCT  
GAACAAAGAGACAAGATGCTAATCCGAATTCCTAGGACCAAGTTTGATGTCCTAGGGC  
[C, A]  
AGCCGCTTAACCCGAGCTGGGGCTCAGCAGTTAAGCACATAGAGGACACAAAAGATGCAT  
CCGTCTCTAGAATCTTACCCCTGAGATGTGAGGGAGTGTGCAGACGATTGTAAATGGGTA  
ACTTCCTGCAGAGCTGGTGTAATAATAAAATATAGCTACCACTTACTGATTGTTTACTTT  
CCTCTAGACTCTGTTCTAAGTGCTTGAATCCTCTAGCTCATTTAACTCTTGCAAGAAGCC  
TACAAAGTAGGTACTTTTTTTTTTATTCCTTTTTTTTAAACAGGGTCTTGCTCTCTTACCC

69701 GAGGCACAGTTTCAGAGAACCCTGAGGGACCCGGTGGGCTCAGGCGGCCTCAAAGCAGCAG  
GTCACCTGACCAGTGAGTGACCACAGATTCCAAGGTGTGACCGAGTGAAAGGGCTTATA  
TCCCAATGCTGACTGCAGTTAAACCCTAATGAGGTATGTGGATCTTCTAGAGGAAGGG  
CCAGGCCCCCTTTAATAAGGACCCTTCTGAACAAAGAGACAAGATGCTAATCCGAATTCCA  
CTAGGACCAAGTTTGATGTCCTAGGGCCAGCCGCTTAACCCGAGCTGGGGCTCAGCAGTT  
[A, C]  
AGCACATAGAGGACACAAAAGATGCATCCGTCTCTAGAATCTTACCCCTGAGATGTGAGG  
GAGTGTGCAGACGATTGTAAATGGGTAACTTCCTGCAGAGCTGGTGTAATAATAAAATAT  
AGCTACCACTTACTGATTGTTTACTTTCTCTAGACTCTGTTCTAAGTGCTTGAATCCTC  
TAGCTCAATTTAACTCTTGCAAGAAGCCCTACAAAGTAGGTACTTTTTTTTATTCTTTTTT  
TTAAACAGGGTCTTGCTCTCTTACCACACTGGAGTGCAATCATGGTTCAC

69773 GTGGAGTGACCACAGATTCCAAGGTGTGACCGAGTGAAAGGGCTTATATCCCAATGCCT  
GACTGCAGTTAAACCCTAATGAGGTATGTGGATCTTCTAGAGGAAGGGCCAGGCCCTTT  
AATAAGGACCCTTCTGAACAAAGAGACAAGATGCTAATCCGAATTCCTAGGACCAAGT  
TTGATGTCCTAGGGCCAGCCGCTTAACCCGAGCTGGGGCTCAGCAGTTAAGCACATAGAG  
GACACAAAAGATGCATCCGTCTCTAGAATCTTACCCCTGAGATGTGAGGGAGTGTGCAGA  
[C, T]  
GATTGTAAATGGGTAACCTCCTGCAGAGCTGGTGTAATAATAAAATATAGCTACCACTTA  
CTGATTGTTTACTTTCTCTAGACTCTGTTCTAAGTGCTTGAATCCTCTAGCTCATTTAA  
CTCTTGCAAGAAGCCTACAAAGTAGGTACTTTTTTTTATTCTTTTTTTTAAACAGGGT  
CTTGCTCTCTTACCACACTGGAGTGCAATCATGGTTCAGTGTAGCCTGGAA  
CTCCTAGGCTCAAGCAATCCTCCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTT

70257 GCTCTCTTACCCACACTGGAGTGCAATCATGGTTCAGTGTAGCCTGGAACCTC  
CTAGGCTCAAGCAATCCTCCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTTGGT  
CCAATCCCCTCAGAGTGAGCAGGTTATCTCACTCCCTGGAAGGCTGGCTTCTCCCCTGCC  
TCTCTTCGGTGCTTGCTCCAGCAAGTTACTGAAGTCTCAGAGGCCTCTCCACCGTGAA  
ATGGACACTGTCTGTCTGTGGGACTACAGGTGGATACCACCAGACCAGCTAATTTTTTAA  
[-, T]  
TTTTTTTTTTTTTTTTTGGTAGAGACAGGGTCTCACTGTGTTGCTCGTGCTGGTCTGAACT  
CCTGGCCTCAAGCAATCCTCCCACCTCAGCCTCCCAAAGTGCTGATATTACAGGTTTGAG  
GCACCATGCCAGTCTGAAGTAGGTTCAATCATCATCTCATTTTATGGATGAGGAAATAA  
ATCCCAAGAAGTTAAATAACTTGTCCAAGTCCAGACAGCCAATAAGTGATTAACTTGGA  
TTTGAGCCCTGGGAAGCCAGACTCCAGAGCCCACAACTGAACCTTGTGCCATACTGC

FIGURE 3, page 80 of 107

70261 TCTTACCCACACTGGAGTGCAGTGGTGCAATCATGGTTCAGTGTAGCCTGGAACCTCTAG  
GCTCAAGCAATCCTCCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTGGTCCAA  
TCCCCTCAGAGTGAGCAGGTTATCTACTCCCTGGAAGGCTGGCTTCTCCCCTGCCTCTC  
TTCGGTGTCTTGCCTCCAGCAAGTTACTGAAGTCCCTCAGAGGCCTCTCCACCGTGAATGG  
ACACTGTCTGTCTGTGGGACTACAGGTGGATACCACCAGACCCAGCTAATTTTTAATTTT  
[-, T]  
TTTTTTTTTTTTGGTAGAGACAGGGTCTCACTGTGTTGCTCGTGCTGGTCTGAAACTCCTG  
GCCTCAAGCAATCCTCCCACCTCAGCCTCCCAAAGTGCTGATATTACAGGTTTGAGGCAC  
CATGCCCAGTCTGAAGTAGGTTCAATCATCATCTCATTTTATGGATGAGGAAATAAATCC  
CAAGAAGTTAAATAACTTGTCCAAGTCCAGACAGCCAATAAGTGATTAAACTTGGATTG  
AGCCCTGGGAAGCCAGACTCCAGAGCCCACACAACCTGAACCCCTGTGCCATACTGCTTAC

70268 CACACTGGAGTGCAGTGGTGCAATCATGGTTCAGTGTAGCCTGGAACCTCTAGGCTCAAG  
CAATCCTCCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTGGTCCAATCCCCTC  
AGAGTGAGCAGGTTATCTACTCCCTGGAAGGCTGGCTTCTCCCCTGCCTCTCTTCGGTG  
CTTGCCCTCCAGCAAGTTACTGAAGTCCCTCAGAGGCCTCTCCACCGTGAATGGACACTGT  
CTGTCTGTGGGACTACAGGTGGATACCACCAGACCCAGCTAATTTTTAATTTTTTTTTTTT  
[-, T]  
TTTTGGTAGAGACAGGGTCTCACTGTGTTGCTCGTGCTGGTCTGAAACTCCTGGCCTCAA  
GCAATCCTCCCACCTCAGCCTCCCAAAGTGCTGATATTACAGGTTTGAGGCACCATGCCC  
AGTCTGAAGTAGGTTCAATCATCATCTCATTTTATGGATGAGGAAATAAATCCCAAGAAG  
TTAAATAACTTGTCCAAGTCCAGACAGCCAATAAGTGATTAAACTTGGATTGAGCCCTG  
GGAAGCCAGACTCCAGAGCCCACACAACCTGAACCCCTGTGCCATACTGCTTACTTGATC

70941 AGAAGGAAACATGATTCAAGAAACTGGGCTGTCTGGCATGGTGCTATAGCACTCCACGTG  
GGGAATATTGTGTTTTCAAAGAAAGGGTGTGTTAGAAGGGGAATGATCATGGACGTTATA  
TCAGATAGACTTGGTCCCTCAACACCACTAAACCTAAGGCCCTCCTCATATTAAAGGGA  
TCACAGTCTCTATTAGGATGATTGTGGGGAGTGAGTGAACCTAGCAGAGTGCCTGGCATG  
TCACTGGCATCAGGAAATGCTATTTCCCTTCTCCACCCCGTCTTTCTCTCAAGCGAAC  
[G, A, T]  
GAGTAGACAAAGATAATTATACCTGGAGTACTTGCAATTTCTTTGGCAGTAGAATAAAGTA  
AATTAAATGTATTTTTGAAGTTGAGGTTTCCATGAACCTTGATTGGCGGTCACTGTGTCC  
CAAGAAAGCCTTTATCTTTGACGTCTCACATGCCGCAATTGCTTATCTCCCTGTCCCA  
GTGCAATTGTCTTAGAAGCTTCTATACTGACTAGTCTTGAGAAAGCCATAAAACATTC  
TCTTTGTGATCCTCAAAGAATAAAATCGTGAGGAGCCTTCGCTGACTGACGGGGAAGTG

71359 TCCCAAGAAAGCCTTTATCTTTGACGTCTCACATGCCGCAATTGCTTATCTCCCTGTTC  
CCAGTGCAATTGTCTTAGAAGCTTCTATACTGACTAGTCTTGGAGAAAGCCATAAAACAT  
TCCTCTTTTGTGATCCTCAAAGAATAAAATCGTGAGGAGCCTTCGCTGACTGACGGGGAA  
GTGTAGAATGAATGCTTCGGTTTGCAGGGATGATCATTGGCAGCAGTCTTTTTTCAGGTT  
ATGAATTCTGATGTTTCCAGATGTTTGAAGATTTTGAGTGTCTTCAGGGGAGCTCGAGT  
[G, T]  
GTCCCATGGCTGCCATTTCTTCTGGTCATAGCCTCGCTGAAGGGAATAGCATTTCACGGG  
AGTGGGTTTAGGGTTGGATGAGGCACCCATCGGGAAGGACATGGGATTTTTTATTCTAAG  
TGCCCTTGCCATAAAGCAAACGACAGGGGTCTATTCCTCTCTCTGGAGAATGTTTCTGG  
GGCAGGTTGGTCTAATCCCCTCAGAGTGAGCAGGTTATCTCACTCCCTGGTAGGCTGCC  
TTCTTCCTTGGCTCACTTCAGTCCTTGCTCCAGCAAGAGGGGTCTCTCCAATGCAAAAT

72550 TGAGTATTATTTGGCAAGATTTATTATTTTTTCATTAAAAAATAAAAATGACCTATAAT  
AATTGTATGTATTTATGAGGTACCTCGTGATGTTTCCATACCTACAATGTATGATGATCA  
GATCCGGGAAATTAGCATATTATCATCTCAAACATTATCATTTCTTTGTGTTGGGAAC  
GTTCAATATCCTCCTTTTAGCTATTTGAAACTATATACTAGATTATTGTTAACTGTAGTC  
CATCTGCAGTGGTATAGAACACTAGAATTTATTCCTGTTATCTTGCTGTAATTATGTCC  
[C, T]  
GTTTAACAAATCCTTCCCTATCCTCTGCTCCCCTGACTCTTTCCAGTCAGCATTATTTAT  
TAGGCACTGATTCTGTGCTGGCTGGGTGCTAGAGAGTTTACATATATTACTTAGCTTCAT  
TTGCCCTCTCTCCATTGCACCAAGAGGCGGCCACTGTGCTGCCCCATTTACAGAGGGTA  
AAGTTCTTGCATCTAGCTAGTGACCAAAGCAGGACTTGAGTCTAGCTAGATCTCTCTGAC  
TCCAGAGGCCACGCTCTCTAATCGTACTCTCCTTGGCTTGACACGGTGGGCTTAGAGAG

75313 AGCCTCCTGAGAAGCTGGGACTACAGGGGTGTGCCACCACACCCAGCTAAGACAAAACT  
CACCTTGTTGTCTTCTTTATGCATGAGCAGATTCCCTTGGTATCTATAGCCGTCGAAGCT  
TTACGTATTTCCCTATTTAGGGACATAAGAATTTTAGGAAAGCAGCGTGTTGGAAGCA

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CGGCACCTGAGATGTTTCATGGAAATCCTTGTGTGACTTCAGAGTGCAGATCTAGAGCAG  
CCCTCTGTTTGTCTGCCCTGGGCCATCCCCTATTTCAAGCAGTCTTTAGTCCAGGAAGTT  
[T, A]

AGGTAGCAGCTCAGGCAGCAGGTGAGCTCTGGAGAGTGCAGGTTCTTTGAGCCC  
AGGGGCACAACCTCTGAGTTGAAGTGACTCCTCCTGGCTGTTGCTTTGAATTTAGAAGAGC  
TGCCCTTTTACCAGCAAGGCAGTCACGCAAAAGATGCTTCAATGTGTGCAAGATCAGGCC  
TGCAGCCCCCAGCCTGTGTCTACAGGCCTCCGAGTCATTATTATTACGGTTTCTATCCCT  
GGGGTTATTGATTTCATCACTGTTTAGTGAAGGAGATCTAAAGCTTTTAAGCCAGAAATT

75541 GATCTAGAGCAGCCCTCTGTTTGTCTGCCCTGGGCCATCCCCTATTTCAAGCAGTCTTTA  
GTCCAGGAAGTTTAGGTAGCAGCTCAGGCAGCAGGTGAGCTCTGGAGAGTGCAGGTTCTGG  
GTTCTTTGAGCCCAGGGGCACAACCTCTGAGTTGAAGTGACTCCTCCTGGCTGTTGCTTTG  
AATTTAGAAGAGCTGCCCTTTTACCAGCAAGGCAGTCACGCAAAAGATGCTTCAATGTGT  
GCAAGATCAGGCCTGCAGCCCCCAGCCTGTGTCTACAGGCCTCCGAGTCATTATTATTAC  
[G, T]  
GTTTCTATCCCTGGGGTTATTGATTTCACTACTGTTTAGTGAAGGAGATCTAAAGCTTTT  
AAGCCAGAAATTAAAGAGGTAATGGAAATTGGCATGCCACTGGAAATGAATTTGCAAAT  
GAGAATTCAATGTTCTAAAAAACTCCCATAAAAAATAAAACCAAAACCCAGAAAGTGAATG  
CTCCTGTGACTGCATTTTTTTCCAAATGTGCATGGGTTTGTTCCTTTAGAGTGTGGCT  
GTATACATTATGAATAATGAGATTTTGATGGTGTCTCGTTCCTACAATTGCTCTTATTA

75957 CAAATGAGAATTCAATGTTCTAAAAAACTCCCATAAAAAATAAAACCAAAACCCAGAAAGT  
GAATGCTCCTGTGACTGCATTTTTTTCCAAATGTGCATGGGTTTGTCTCCTTTAGAGTG  
TGCTGTATACATTATGGAATAATGAGATTTTGATGGTGTCTCGTTCCTACAATTGCTCT  
TATTACTTATCACAATACAATGTATTCAATTTATATAACTAATATTTACTTAGTACCTATA  
ATGAAGCAGGTGCTATGTTTGGCTCTAGCGATTAAAAACAATAAAAAATGCAAGATGCC  
[T, G]  
CCACCCTGTCTCAGGGAGCTTGAGGTTTCAATTAATTATATCGCTAGCCAATTCTGGC  
ATGGTGCTTACTGTGGACAGGAAGTCTCTAAATGCTTCACGTGTAGTAACCTCATTTAAA  
TTTTACTTACATCTATGAAGTGGGTAAGCAACAGAGGAACAGAGAAGTTAAATAACTT  
GCCCAAGCTGAAGTGAGAGGTGGAAGTGTGATCCGCCAAGGCAGTCCGGCTCTAGATC  
CATGGTTTTTTAGCCATGATGCTCTACTCTAGTGGATAGTTACAGCCCAGTAGCTATTGGT

76415 GGAACAGAGAAGTTAAATAACTTGCCCAAGCTGAAGTGAGAGGTGGAAGTGTGATCCGGC  
CAAGGCAGTCCGGCTCTAGAATCCATGGTTTTTTAGCCATGATGCTCTACTCTAGTGGATA  
GTTACAGCCCAGTAGCTATTGGTTACTAGATTGGTTCTAGAAGACAAGGAAGCACTCAGG  
TCCTTAGTACAGAGCAGGAGTCTCTGACTCAACCTATGGGACCCCAAGAGGACCTTCA  
TTCACCTGTGAGTCAACTGCAGAGAGTCGTGATTACCTCCTGGTTGTCCTTTAGAGTGGC  
[A, C]  
GGGCTTTGTGTCTTAACATAAGGTGTTGAAGCTGGGTCAACCTTTTCGATCTAAAACCAA  
TGTCATGGGTTATCATTACAGGTCTGCAATTAAGAGTAGCTTGTCACTTTATATTGGGAA  
CATTTATTTTTCTTCTCTCTATGGAATGGGCAGAAGAGATGAAAAGCCTGCTGGTG  
CAGCTTAACCTTTCTCAGTAAGTGAGTGTTTAACCTTTTGTTTTTTTAAAAATGGAGATG  
AGACATACAAATTATGACTTCTCTATGTTGTCCTTTTTTTTAGTTGGAAGAAGGTGACAT

77872 TCTGTAGCTGCTTTTGTAGTCCAGTACAGTTTTTTAAAAATAGAAATTGGATAGACCCA  
TTTTTAATGGGAATGATCTCAAGTGCAGAGAGAGCAAGGCATATATCAGACACTCTCCTC  
AGGACCAGGGCAATTTTTCAACATCAGTTGGCAAATTTGTTATTCTGCCTGTAGAGTGTA  
AGTCCAAACTGAGATGAAAGAGTGACAGCTTGTAGTCTGAAAGTTTATTGATCATATCA  
AAGTATACACATCTATCCCTGATTCTTAGTGGACTTGATACTTTCTCGTGGTTTTAAAA  
[T, A]  
TTGTCTTATTTTCATCCTTCCATGTAGTCAAAGAGAGACAGAGGAAATGCATTTTCCATCA  
TAAGGCACAATTTGGAAGCTACAAGAGTGCCCCCAATATGGCCTGGTCTCATAAGATAA  
TATTTAGATAGATTAGTCGTTAGTGAATACCAAGGGGCTAATGAATTGAGTCTCAGAAA  
TCCCCATTGTAAGGGATTAACCTGTAGTAGCAAGGAAAGCTAGCGTGTCTAAGACCATAC  
GCCATGAGCAAGCATGCTAGCCCATCCTGGGTTTCTCTCCTCTTCTCCAAACAGATTC

78058 AACTGAGATGAAAGAGTGACAGCTTGTTAGTCTGAAAGTTTATTGATCATATCAAAGTAT  
ACACATCTATCCCTGATTCTTAGTGGACTTGATACTTTCTCGTGGTTTTAAATTTGTC  
TTATTTTCATCCTTCCATGTAGTCAAAGAGAGACAGAGGAAATGCATTTTCCATCATAGG  
CACAATTTGGAAGCTACAAGAGTGCCCCCAATATGGCCTGGTCTCATAAGATAATATTT  
AGATAGATTAGTCGTTAGTGAATACCCAAGGGGCTAATGAATTGAGTCTCAGAAATCCCC  
[A, C]

FIGURE 3, page 82 of 107

79799

80598

82609

83645

83756

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TCCTGCTCGTGATGAGGCTAGGGAGGGATTTTTAGCGTATCTTTAATTGTTGCCGAAGTA  
TGAACTCGGGGAAGGGGGCAACTGTGAAGCAGTGATGCATAGACTAAGTCTCCTGGAAGA

84687 GGGTGTTACTTTGGACCATCTCATTTAATCCTCACAAACAACCCTGTGGGGAAGGTATTATC  
TCTAGTTTGCAAATGAGGAACTAGGCTCAGAGAGGTTCAAACAACCTTGCCCAAGGTTCT  
GAAGTTAATAACGGCCACAGCCAGGATGGCTCTTAACTCCTGCCCTGTGGAACAAGCTC  
AACGTAAAACATTTCTTACAAGACAGAAAAGAGTGAAAAAGCAACCAAATCCTGCCCTTGC  
GGAAATGCCCACTTTGGGTGAACATTCTTCTAGACATTTTTTGTGTGTATATGCACAG  
[A, C]  
AACTTGTAACATTTTGCATAATCTGGGCCACCCCATGCCTGCAAGCTTTCTATAAATGTC  
ACCATATTCTATATCCTAGCGTTTCCCCCTATTTAACACTAATTTTCTGATTTTCACAA  
CTGGGTGCATAGTATTTTGCTTTGGGATGCTACCATCATCCACTTAACCAGTTCTCTCTA  
GATCACTGCAGGTTCTTGAGTAGGGGAATAATGTATTGGAACCTTTTTTTTTTTGAAGAA  
AAAAAAATAAACAACTTTTAACTGAGTCTTATGCTTTTTCCCTTTCTTTGCAGCATGC

84761 GAGGAACTAGGCTCAGAGAGGTTCAAACAACCTTGCCCAAGGTTCTGAAGTTAATAACGG  
CCACAGCCAGGATGGCTCTTAACTCCTGCCCTGTGGAACAAGCTCAACGTAAAAACATTC  
TTACAAGACAGAAAAGAGTGAAAAAGCAACCAAATCCTGCCCTTGCGGAAATGCCCACTT  
TGGGTGAACATTTCTTCTAGACATTTTTTGTGTGTGTATATGCACAGAACTTGTAACATT  
TTGCATAATCTGGGCCACCCCATGCCTGCAAGCTTTCTATAAATGTCACCATATTCTATA  
[C, T]  
CCTAGCGTTTCCCCCTATTTAACACTAATTTTCTGATTTTCACAACTGGGTGCATAGTA  
TTTTGCTTTGGGATGCTACCATCATCCACTTAACCAGTTCTCTCTAGATCACTGCAGGTT  
CTTGAGTAGGGGAATAATGTATTGGAACCTTTTTTTTTTTGAAGAAAAAATAAACAA  
ACTTTTAACTGAGTCTTATGCTTTTTCCCTTTCTTTGCAGCATGCTCTTGATGCTGACA  
ATGCGGGAGTCAGTCCAATAGGAACTCTTCCAACAACAGCAGCCACTGGGACCTCGGCA

84911 CAAAATCCTGCCCTTGCGGAAATGCCCACTTTGGGTGAACATTTCTTCTAGACATTTTTTGT  
GTGTGTATATGCACAGAACTTGTAACATTTTGCATAATCTGGGCCACCCCATGCCTGCA  
AGCTTTCTATAAATGTCACCATATTCTATATCCTAGCGTTTCCCCCTATTTAACACTAA  
TTTTCTGATTTTCAACAACCTGGGTGCATAGTATTTTGCTTTGGGATGCTACCATCATCCAC  
TTAACAGTTCTCTCTAGATCACTGCAGGTTCTTGAGTAGGGGAATAATGTATTGGAACC  
[-, T]  
TTTTTTTTTTGAAGAAAAAATAAACAACTTTTAACTGAGTCTTATGCTTTTTCCCT  
TTTCTTTGCAGCATGCTCTTGATGCTGACAATGCGGGAGTCAGTCCAATAGGAACTCTT  
CCAACAACAGCAGCCACTGGGACCTCGGCAGTGCCTTTTTCTTTGCTGGAAGTGCATTA  
CGACCATAGGTACCGTTTGTGCTAATATCTCTCTCTGCAGGTCATCTTGAGTAAG  
GGCGCTTAGTCAGTGTGTTTGTCTCATAGCATACACTATAGTTTGAGGTTTCAAGGAGGC

84921 CCTTGCGGAAATGCCCACTTTGGGTGAACATTTCTTCTAGACATTTTTTGTGTGTGTATAT  
GCACAGAACTTGTAACATTTTGCATAATCTGGGCCACCCCATGCCTGCAAGCTTTCTAT  
AAATGTCACCATATTCTATATCCTAGCGTTTCCCCCTATTTAACACTAATTTCTGATT  
TTCACAACCTGGGTGCATAGTATTTTGCTTTGGGATGCTACCATCATCCACTTAACCAGTT  
CTCTCTAGATCACTGCAGGTTCTTGAGTAGGGGAATAATGTATTGGAACCTTTTTTTTTT  
[-, T]  
GAAGAAAAAATAAACAACTTTTAACTGAGTCTTATGCTTTTTCCCTTTCTTTGCA  
GCATGCTCTTGATGCTGACAATGCGGGAGTCAGTCCAATAGGAACTCTTCCAACAACAG  
CAGCCACTGGGACCTCGGCAGTGCCTTTTTCTTTGCTGGAAGTGCATTACGACCATAGG  
TACCCGTTTGTGCTAATATCTCTCTCTGCAGGTCATCTTGAGTAAGGGCGCTTAGT  
CAGTGTGTTTGTCTCATAGCATACACTATAGTTTGAGGTTTCAAGGAGGCTTACGAAACA

85786 ACCTTTTCTTACCTTCCCAGAGACTGTTGCTTTTCTGCTGTTTTGATTGTTGATTTTAAACA  
CTCATCCCCATGTCTTAAATATCATGCTTGTGCTACTTCTGGAATTTTCAAGTTTGGGG  
ATTTTTTTTGAATTTCCATTGTGGAAGATGAGGAGTTAGTTCTTCTTCTGCTGCTC  
ATCAGAGAAGGGCTCTTTTCTGCTCCTGCTTCCCAATATTTAATTAGATAGAAGTG  
AAACATCTGCATGATTTTGAAGTAAATGCTTTCTGCAGCTGATCATAGAGTGAACAG  
[C, T]  
GATGACCTCTTTCTGTATCAGTCTTTGTCTTATTTTTTGTATGTGTGCTTTTTTTTCT  
GACACTTGGTGAGTTTGTATTTTGTCTTAGGGGTTAACTTTATTTATTTATTTATTT  
ATTTATTTTATTTATTTATTTATTTATTTTATTTTATTTTATTTTATTTTATTTT  
CCCAGGCTGGAGTGCAGTGGTGCAATCTCGGCTCACTGCAACCTCCGCCTCAGGGTTCA  
AGTGATTCTTTGCTCATTCTCTGAGTAGCTGGGATTACAGGCGCCACCACCATGCC

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CACCCAGGCTGGAGTGCAAGTGGTGAATCTCGGCTCACTGCAACCTCCGCCTCACGGGTT  
CAAGTGATTCTCTTGCCCTATTCTCTGAGTAGCTGGGATTACAGGCGCCACCACCATG  
[C, A]

CTAGCTAATTTTTGTATTTTTTAGTAGAGATGGGGTTTACCACATTGGCCAGGCTGGTCT  
CAAACCTCTGACCTCAGGTGATCTGCCCCGCTCAGCCTCCCAAAGTGTGGGATTACCGG  
CGTGAGCCACCGCACCTGGCCTAGGGGTTAACTTTATAAGTATAATGGCATATAATAATT  
TTAGTGTCTATTCTGTTAACCAGCATGTATTGATCCCTATAACGGGTGATGATATCTCT  
TTTCTCTCTTTTTTCCAACACAAAGTTTGGTGGACATCATCTTTTAAATGATTAAATTTG

86585 CCAGCATGTATTCGATCCCTATAACGGGTGATGATATCTCTTTTCTCTCTTTTCCAACA  
CAAAGTTTTGGTGGACATCATCTTTTAAATGATTAAATTTGCTTATGTTTCTCTTATATG  
ATTTGCCAGCTTTAAATGATAACTCTTGGCACTCAGCTATTACATATAAGGCAGTCAGTG  
AACTTAGCATCTCAATTTCCCTTCCCTCTTCCACTATCCACTCTTATTCATGGTGTCTATT  
CTATATAAGTTGTATCTCACTTTATTGTGCTTTGCTTTATTGTGCTTTGAAGATGTTGAG  
[T, -]

TTTTTTTTTTTAAACTAATTTAAGGTGTATGGCAATCCCGCATTGAACAAGTCTATTGGT  
GCCATTTTTCCAACGTCGTGTGCTCCACTCTGTGTCTCTGCCACATTTGGTAATTTTCA  
CAATAGTTTCAACCTTTTTTCATTTTTGATTATATCTGTTAAGGAGATCTGTGGTCAGTGA  
TCTTTGATGTCTGATTGTCTATTGTTTGGGGTGGCACAACCATGCCCTTTGAAGATGG  
TGAACCTAATCAATAAATGCCGTGTGTTCTGACTGTTCCACCAGCTGGCCATTAGGCAT

86596 TCGATCCCTATAACGGGTGATGATATCTCTTTTCTCTCTTTTCCAACACAAAGTTTTGG  
TGGACATCATCTTTTAAATGATTAAATTTGCTTATGTTTCTCTTATATGATTTGCCAGCT  
TTAAATGATAACTCTTGGCACTCAGCTATTACATATAAGGCAGTCAGTGAACCTAGCATC  
TCAATTTCCCTTCCCTCTTCCACTATCCACTCTTATTCATGGTGTCTATTCTATATAAGTT  
GTATCTCACTTTATTGTGCTTTGCTTTATTGTGCTTTGAAGATGTTGAGTTTTTTTTTTT  
[T, -]

AAACTAATTTAAGGTGTATGGCAATCCCGCATTGAACAAGTCTATTGGTGGCATTTTTCC  
AACGTCGTGTGCTCCACTCTGTGTCTCTGCCACATTTGGTAATTTTACAATAGTTTCA  
ACCTTTTTTCATTTTGATTATATCTGTTAAGGAGATCTGTGGTCAGTGATCTTTGATGTC  
ATGATTGTCTATTGTTTGGGGTGGCACAACCATGCCCTTTGAAGATGGTGAACCTAATC  
AATAAATGCCGTGTGTTCTGACTGTTCCACCAGCTGGCCATTAGGCATCCAGATCCCT

86601 CCCTATAACGGGTGATGATATCTCTTTTCTCTCTTTTCCAACACAAAGTTTTGGTGGAC  
ATCATCTTTTAAATGATTAAATTTGCTTATGTTTCTCTTATATGATTTGCCAGCTTTAAA  
TGATAACTCTTGGCACTCAGCTATTACATATAAGGCAGTCAGTGAACCTAGCATCTCAAT  
TTCCCTTTCCCTTCCACTATCCACTCTTATTCATGGTGTCTATTCTATATAAGTTGTATC  
TCACTTTATTGTGCTTTGCTTTATTGTGCTTTGAAGATGTTGAGTTTTTTTTTTTTAAAC  
[T, A]

AATTTAAGGTGTATGGCAATCCCGCATTGAACAAGTCTATTGGTGGCATTTTTCCAACGT  
CGTGTGCTCCACTCTGTGTCTCTGCCACATTTGGTAATTTTACAATAGTTTCAACCTT  
TTTCATTTTGGATTATATCTGTTAAGGAGATCTGTGGTCAGTGATCTTTGATGTCTGAT  
TGTTGATTGTTTTGGGGTGGCACAACCATGCCCTTTGAAGATGGTGAACCTAATCAATAA  
ATGCCGTGTGTTCTGACTGTTCCACCAGCTGGCCATTAGGCATCCAGATCCCTGAGGC

89478 GTATGCCTGTATAACCTCAGGGTATGTAATTTAGATTTTAAATTTGTTACCCTGATATTG  
CATTGTGTTTTAGTCGTAGCTCTATAGTTAGATATCATTAATGTTTCACTCTAGTCCTTTT  
GCTGTGGTTTTATCTCATGATCACTTACTTGGCTGAAAGTCATCTTCAAGTAGTTGCCCTA  
AGAATGGCTCAGGGGAGCAATATTCTGTGAGATCTTGCAATTGTTACAGTTGTAGCTTAA  
CATTTGAAGGATAGTTGAAACAAAATGAAATCCATTTATTGACTCACATTTTCTTTTTTC  
[-, T]

TTTTTTTTTTTGGAGTGGGTCTTGCTCTGTTGTCCAGGCTGGAGTACAGTGGTATGAACA  
TAGCTCACTGCAGTCTCCAACCTCTGGGCCCAAGTGATCTTTTGGCTTCAGCCTCCTGAG  
TAGCTGGGACTACAGGCGCATACCACAGGGCTAGCTAATTTTTTAAATATTTTGTAGAA  
GCCAGGTCTTGCTGTGTTGCCAGACTGGTCTCAGACTCCTGGCCTCAAAGGATCCTCCT  
ACCTTGGCCTCCAGAGTGCTAGGATTACATGTGTGAGCCACCAGCCTGGCTTTACATT

89488 ATAACCTCAGGGTATGTAATTTAGATTTTAAATTTGTTACCCTGATATTGCAATTTGTTTT  
AGTCGTAGCTCTATAGTTAGATATCATTAATGTTTCATCTCTAGTCCTTTTGTGTGGTTT  
ATCTCATGATCACTTACTTGGCTGAAAGTCATCTTCAAGTAGTTGCCCTAAGAATGGCTC  
AGGGGAGCAATATTCTGTGAGATCTTGCAATTGTTACAGTTGTAGCTTAACATTTGAAGG  
ATAGTTGAAACAAAATGAAATCCATTTTATTGACTCACATTTTCTTTTTTTTTTTTTT  
[-, T]

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GAGACTGGGTCTTGCTCTGTTGTCCAGGCTGGAGTACAGTGGTATGAACATAGCTCACTG  
CAGTCTCCAACCTCCTGGGCCCAAGTGATCTTTTGGCTTCAGCCTCCTGAGTAGCTGGGAC  
TACAGGCGCATACCAAGGCTAGCTAATTTTAAAAATATTTTGTAGAAGCCAGGTCTT  
GCTGTGTTGCCAGACTGGTCTCAGACTCCTGGCCTCAAAGGATCCTCCTACCTTGGCCT  
CCCAGAGTGTAGGATTACATGTGTGAGCCACCACGCTGGCTTTACATTTTCTTTTAA

91631 TTGCTTTTGTTTTAAGATCTAGCCTTCAGGACCTATGTTGTTTCTAGGTGAAATCCAGAA  
AGTCATATGCAACAAGAACATTTTGGATGAAGGAAAATTGCCATTGTTATTTAGAAACAC  
TCTTAATCTAATTATATGACATGCTAGGTTTACACTTGCAAATCTGCAAATATATTTGGTG  
TTAGCTATTTAAAAGTATTCAAGATGCCCATGACACCAGTGGGTCTGGGGCTTAGAAGCCT  
TTTCTGGCACTCTAGGCCAGGTTAGGTGAGCTTAATCCACAGACTCACAGCGTCCAACAA  
[A, G]  
GGAAGCTGGGTGGCCTGACACCATTTAGTATACGGGCAAAAAGTGTAGCAACCTGAACA  
ACACCAGAGGGCGTTGCTGTAGTGGATCCAAGAAGACCAATGTGAGTTTCATTGTGTTT  
AGCAGATTGTTAACCTGGGAAAAAGTGTACGCATTGTAGGAGGATCTATTGTACACCAA  
TTAAATTGAGAAAGTCTGGGCCACTTCAAGAAGTACATTTTGGAAAATGCTCTCTGATA  
CCCGGTATTGGATTTCATGAGACATTAGTGTGTATATTGAAGGAACTCCTAATTTTCTTG

91898 CAGCTTAATCCACAGACTCACAGCGTCCAACAAAGGAAGCTGGGTGGCCTGACACCATT  
AGTATACGGGCAAAAAGTGTAGCAACCTGAACAACACCAGAGGGCGTTGCTGTAGTGGGA  
TCCAAGAAGACCAATGTGAGGTTTCATTGTGTTTACGAGATTGTTAACCTGGGAAAAAGT  
GTCACGCATTGTAGGAGGATCTATTGTACACCAATTAATTTGAGAAAGTCTGGGCCACT  
TCAAGAAGTACATTTTGGAAAATGCTCTCTGATACCCGGTATTGGATTTCATGAGACATTA  
[G, C]  
TGTGTATATTGAAGGAACTCCTAATTTTCTGTTTCATGACATGGCTAAATGAATGATC  
TGTCTGCTGCATTGAAAAACACTATGGCTACATTGGAAGGTGCATTAATGGTATTATTG  
TGTAGCTTGTAGGAATCCAGGAACCTGGTTTATGAACAACATGTTTATTGATCCAC  
ATAATATTATGTGACTGAGGAATGGTGGCTCCATCTGCCTAATGAAGAAGTTTGATATG  
CGATGGTTTTTGCCCTTTTTTGTGTGTGTGCTTACACCGAATCTTTGAGTTTGAGCAAA

93506 AATTTTAACTCCAGAGTGGAGGATCTTTATAGAGTCATACAGTTAGAGAATCCAAAGAA  
GCCCTTAATACAATGTAAGTAAGAATAATGAGGTGCAGAAATAATTGTTTTTCCAGTTAC  
TTAGTGGTAAATTCATTTGTTGCTGTGGTTCGCAAGGTTTATAAGAAAACCTCAGAGCCCA  
GCAATTCTTCCAGTTCTTCTGAGCAATTTTCCACTAGTTAGGAGTCAGGAAAGAGGAAC  
CGTGAGAGCTGAGGAGCTGTGTATTTCATTAATTGTGAAATACACAAATATTGGCCTGTT  
[T, C]  
CCTTGCGATCATAAAATTTGCAACGTAATATTGCAGACATTTTTGCATATTACTAAAGTT  
CTTTGAAAAGTGTATTCTTTGATGGTTTCTATTGGATCCACTATTCACACTATAATCACA  
TATTCCTGGGAACTTAAGCTGTTTCTATTTTAGTAATAGTGTAAACCATGGTGTAAACG  
TTGTGAAGTGTGGTCTTCATCTCTGGTTGTTGCCTTGGAAAGGTTACCAAGGGTTTGCTC  
TGTCAAAGGAAATGAAAGGCTTGCCAAATTTCTTTCCAGAAAGGCTCTCATGAGCAGCTT

94409 GTCCCTTTCTCAGTAACTAATTCAACGTGAGAAAGTCCCACCTGCCTTTGATTATTGGCT  
CAGCTGGTGGGTCCCCGTAAGTACTAGCTTTTCTAAGCTGGATGAATGATGCTCACTTCTAT  
GTGCAGATGCTTTTTCACAAGCTGTCAATTTGTAGAAGGACAGCGAGCGATCAGGTTCTTA  
CCAATATCTGTGAAATGCGATTAGATTTTAGTCTGTGAGGCATTTTCAGATTGAGCCACC  
TGACTCTGCCCACATCAGAGAGAGAGCCTCTGGTCAGGACCAGGTGGTAGCCAGTCACTG  
[T, C]  
GTCACTAGCCTGGCAGCCTCATTTAAGGGTTGTCCCTATCAAACATATCGAGGCACCTGTT  
GGTACTTACCCAGCACTGGATTGGATGTTTATTTTATTTTATTTTATTTTATTTTATTTCA  
GAGAAGGGGTATTGCTTTGTTGCCCTGGGCTGGAGTGCAGTGGTGTGATCATAGCTTACTG  
TAACCTCAAACCTCCTAGCTCAAATGGTCTCGCGCCTCAGCCAACCAAGTAGCTGGAAC  
ATAGTTGTGCACCACCATGCCGGCTAATTAATAAAATTTTTTTTTTTTGTAGAGACAAGGG

94689 CAGGTGGTAGCCAGTCACTGTGTCACTAGCCTGGCAGCCTCATTTAAGGGTTGTCCCTAT  
CAAACATATCGAGGACCTGTTGGTACTTACCCAGCACTGGATTGGATGTTTATTTTAT  
TTTTATTTTATTTTATTTTATTAGAGAAGGGGTATTGCTTTGTTGCCCTGGGCTGGAGTGCAG  
TGGTGTGATCATAGCTTACTGTAACTCAAACCTCCTAGCTCAAATGGTCTCGCGCCTCA  
GCCAACCAAGTAGCTGGAACATAGTTGTGCACCACCATGCCGGGCTAATTAATAAAATTT  
[T, A]  
TTTTTTTGTAGAGACAAGGGCTCACAATATTGTTTCAAGGCTGGTCTCAAATTCCTGGCCTC  
AAGTGATCCTCCACCTTGGCCTCCCAAAGTGTGAGATTATGAGTGTGAGCCCCACTTG  
ATTTAGATGGGATGTTTAACTGTGCCTTTGAAAAGAGCAATCACCGTGGCTAACATTTA

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CTGAGTTCTTACTAGTTAACGTGCATTGTGCTCCACATACATTATCTCATTTAATCCTGC  
ATAACCACATGAGGTGGGTACTGTTATTAGCCTCATTTTATCTATGAGAAGACTGAGGCC

94856 GGCTGGAGTGCAGTGGTGTGATCATAGCTTACTGTAACCTCAAACCTCTAGCTCAAATGG  
TCCTCGCGCCTCAGCCAACCAAGTAGCTGGAACATAGTTGTGCACCACCATGCCGGCT  
AATTAATAAATTTTCTTTTGTAGAGACAAGGGCTCACAATATGTTTCAGGCTGGTCTC  
AAATTCTGGCCTCAAGTGATCCTCCACCTTGGCCTCCCAAAGTGCTGAGATTATGAGT  
GTGAGCCCCACTTGATTTAGATGGGATGTTTAACTGTGCCTTTGAAAAGAGCAATCACC  
[G, A]  
TGGCTAACATTTACTGAGTTCTTACTAGTTAACGTGCATTGTGCTCCACATACATTATCT  
CATTTAATCCTGCATAACCACATGAGGTGGGTACTGTTATTAGCCTCATTTTATCTATGA  
GAAGACTGAGGCCAGAGAAGTTAAATAACTTGCCCGGTATTTCATAGTTAGTAAGCAGT  
GGAGTCCAGCTAGATTACCAGGACCAGCTACATAATTTGTGGCACCCAGTACAAATGA  
AGTGGGGTCCCTTAGAGCATTAACAAGCACAGGACCCATCTAAGCGTGGGCCCTGTGG

95303 TAACTTGCCCGGTATTTTCATAGTTAGTAAGCAGTGGAGTCCAGCTAGATTCACCAGGACC  
AGCTACATAAATTTGTGGCACCCAGTACAAATTGAAGTGGGGTCCCTTAGAGCATTAAACC  
AAGCACAGGACCCATCTAAGCGTGGGCCCTGTGGGACTGCACAGGGTGCACATCCATAAA  
GCAGCCCTGCCTGCGCAGACAGACTGGTGACCATAATAAGAAAGCACACTCTCAACTAAA  
CAAGTAGGGCTGCACAACACACAGTTGGGCCAAGATTTGACTTTGGCACGTAAACAGCAA  
[A, G]  
TGGAAGCCTTTGTGTGCACTCCTCAGGCACAAGTCTCTTTAAATGCCAGCTTTCTCTTC  
CTGAAAACCGGGAACTCTTTTCTAGCCAGAGGTGAACAGATCTGAGCTCATCCTGGTGC  
TGTGCGTTTCATTACAGCCTCCCTTGGCTGTTTGCCTTGTGGAGTTGGTTGTCTTCTGC  
TGAAAGTACCACCTGATGCTGTGGGTGCTATGGGAGAACAGTGAAGTTTCTGGAGGGAA  
GATAGGAATCAACCGCCTGTTTCTCTGGGACTGAGTTTCTCTGGAGACATATTGTCTCA

95373 TTTGTGGCACCCAGTACAAATTGAAGTGGGGTCCCTTAGAGCATTAAACAAGCACAGGA  
CCCATCTAAGCGTGGGCCCTGTGGGACTGCACAGGGTGCACATCCATAAAGCAGCCCTGC  
CTGCGCAGACAGACTGGTGACCATAATAAGAAAGCACACTCTCAACTAAACAAGTAGGGC  
TGCAACAACACAGTTGGGCCAAGATTTGACTTTGGCACGTAAACAGCAAATGGAAGCCT  
TTGTGTGCACTCCTCAGGCACAAGTCTCTTTAAATGCCAGCTTTCTCTCTGAAAAAC  
[G, A]  
GGGAACTCTTTTCTAGCCAGAGGTGAACAGATCTGAGCTCATCCTGGTGTCTGTGCGTTCA  
TTACAGCCTCCCTTGGCTGTTTGCCTTGTGGAGTTGGTTGTCTTCTGCTGAAAGTCAC  
CACCTGATGCTGTGGGTGCTATGGGAGAACAGTGAAGTTTCTGGAGGGAAGATAGGAATC  
AACCGCCTGTTTTCTCTGGGACTGAGTTTTCTCTGGAGACATATTGCTCAGAAACAATTC  
CTTCCACAGTAAAGCACAAAGGCAACCGGGTGTCTAGTTTGCATCATATTTACAGGTA

95657 TCTCTTCTGAAAAACGGGGAACCTTTTTCTAGCCAGAGGTGAACAGATCTGAGCTCATC  
CTGGTGTCTGTGCGTTTCATTACAGCCTCCCTTGGCTGTTTGCCTTGTGGAGTTGGTTGT  
CTTCTGCTGAAAGTACCACCTGATGCTGTGGGTGCTATGGGAGAACAGTGAAGTTTCTG  
GAGGGAAGATAGGAATCAACCGCCTGTTTTCTCTGGGACTGAGTTTCTCTGGAGACATA  
TTGCTCAGAAACAATTCTTCCACAGTAAAGCACAAAGGCAACCGGGTGTCTAGTTTGC  
[A, T]  
TCATATTTACAGGTATTTAATCTTCACATGTAACCTTGCTTTGCATGTAACCTCATTTA  
ATCTTTAATAGCTATGGGTAGGCACTTTAATAGCCTTGTCTTTTGTGAGAAAGTGAGG  
GAGAGAGATTAAGAATGTGCCTATGACCTGAGAGTTGGTAAATAGAAGAATCAGAACAGA  
AATCTGTGTAGTCTCTAGTTCTAGAGCCTACAGACAACTGTACACCTTACTTCAAAGTT  
CTACCCAAGCATTCTAGAAGGATGAGCAGGGCAGTCAAGAGGCGGGGTGTAAC TAGATC

96312 AAGTGTCTGGAATTTTCCAGAGTGACAGTGTGAGGGTCAAACAGTCTCTCCTTATAGTT  
CACCAGGAGCATGGAGCACAAATACACTCACACACACGCCCATGCATGAGATACAGCATC  
ACTCAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTGTG  
AATATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCAAGAAGTTAGC  
TTTAATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTG  
[-, A]  
TAATAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCC  
CCCTGCATTTTCTTGTAGTACCTCTGACACTAGGATTGCAGATGTTAAGTGGGTCTAAG  
GAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTTCATCTCTCACTTCTCCCT  
GATGCTCCATGGTAAGCCACAGTGCTTACCCAGGAGGTGGGTGGGGTGGTCTCTCTG  
AAAGCTGGAGGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGT

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96315 TGCTGGAATTTTCCCAGAGTGACAGTGGTTGAGGGTCAAACAGTCTCTCCTTATAGTTCAC  
CAAAGGCATGGAGCACAATACTACACTCACACACACGCCCATGCATGAGATACAGCATCACT  
CAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTGTGAAT  
ATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTT  
AATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATA  
[- , A]  
TAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCC  
TGCAATTTTCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAG  
AACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGAT  
GCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTTCATCTCTGAAA  
GCTGGAGGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGTTCC

96329 CAGAGTGACAGTGGTTGAGGGTCAAACAGTCTCTCCTTATAGTTCACCAAAGGCATGGAGC  
ACAAATACACTCACACACACGCCCATGCATGAGATACAGCATCACTCAAGAATGATGACT  
TTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTGTGAATATATTTAAAGGCTT  
GTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTTAATATTATTTTGT  
GTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATAATAATAATAAAT  
[- , T, A]  
CTTTCGATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCCTGCATTTTCCTTGA  
GTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAGAACTAGGTAGTGTG  
AGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGATGCTCCATGGTAAGC  
CACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTTCATCTCTGAAAGCTGGAGGAAGGG  
GTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGTTCCAAGCCTCCACTTGT

96370 TTCACCAAAGGCATGGAGCACAATACTCACACACACGCCCATGCATGAGATACAGCA  
TCACTCAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTG  
TGAATATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTA  
GCTTTAATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTG  
TGATAATAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTT  
[C, T]  
CCCCCTGCATTTTCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTA  
AGGAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCC  
CTGATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTTCATCTC  
TGAAAGCTGGAGGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCA  
GTTCCAAGCCTCCACTTGTGTTGCCTATGTCTGCAATATATTTCTTTCTGAGACACTTGA

96372 CACCAAAGGCATGGAGCACAATACTCACACACACGCCCATGCATGAGATACAGCATC  
ACTCAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTGTG  
AATATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGC  
TTTAATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTG  
ATAATAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCC  
[C, T]  
CCCTGCATTTTCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAG  
GAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCT  
GATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTTCATCTCTG  
AAAGCTGGAGGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGT  
TCCAAGCCTCCACTTGTGTTGCCTATGTCTGCAATATATTTCTTTCTGAGACACTTGGACA

96439 AATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTGTGAATATAT  
TTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTTAATA  
TTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATAATAA  
TAATAATAATACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCCTGC  
ATTTTCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAGAAC  
[T, C]  
AGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGATGCTC  
CATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTTCATCTCTGAAAGCTG  
GAGGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGTTCCAAGC  
CTCCACTTGTGTTGCCTATGTCTGCAATATATTTCTTTCTGAGACACTTGGACAACCTATA  
TTCCCCAAAGTTAGGCTATTGTGAGACAGTCAAGCTGGGGTCTTCAGTGTTCACAAGT

96468 TGTACCAAAGAAAGATGGCTGTGAATATATTTAAAGGCTTGTGTTGAGTATTGCATCACT  
CATGCTCTTACCCAAGAACTTAGCTTTAATATTATTTTGTGTTCTAGTCAACAAAACAC  
TGACAAATAAGGAACCAATTGTGATAATAATAATAATAACTTTGCATTGGTACAGTA

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CTTTACAGTCCATTGATTTTTTCCCCCTGCATTTTCCTTGAGTACCTCTGACACTAGGA  
TTTGCAGATGTTAAGTGGGTCTAAGGAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAG  
[G, A]

TCTTTTCATCTCCTCACTTCTCCCTGATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGA  
GGTGGGTGGGGTGGTTCATCTCTGAAAGCTGGAGGAAGGGGGTGTAGCACTTGTGAGGAT  
TAATGAGATGCCTGTTTCATCCAGTTCCAAGCCTCCACTTGTTCCTATGTCTGCAATAT  
ATTTCTTTCTGAGACACTTGGACAACCTATATTCCCCAAAGTTAGGCTATTGTGAGACAG  
TCAAGCTGGGGTCTTCAGTGTTTTCAAGTTACTTGAATGTTTCCAAGAGTCACCATAA

96501 AAAGGCTTGTTCAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTTAATATT  
ATTTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATAATAATA  
ATAATAATACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCCTGCAT  
TTTCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAGAACTA  
GGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGATGCTCC  
[A, G]

TGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGTGGTTCATCTCTGAAAGCTGGA  
GGAAGGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGTTCCAAGCCT  
CCACTTGTTCCTATGTCTGCAATATATTTCTTCTGAGACACTTGGACAACCTATATT  
CCCCAAAGTTAGGCTATTGTGAGACAGTCAAGCTGGGGTCTTCAGTGTTCACAAGTTA  
CTTGAATGTTTCCAAGAGTCACCATAAACCTGCATAAAGTGAACTGTAGAGGCTCATT

97217 TTTTGCATATTTAAATCAAAATCCTGGTGAGTAAAGGAAATACAAGATGAGGAAGCCTAG  
CCTGAACACTCATTTTAGAAATGGAAGCTGTAATTTAGATTATTATAAGAGGTTGAATG  
ATTGAGAACAGAAAGATTGCAAAAGAAAGTATCCAGGTGACTCATTCCCGAAGGCAGAAAG  
CAACCGTGAGTTCTGCAGGCCTGTGGGTGGCTGAATGATGGACTAACCATCAACGTTTTT  
TTATCATGTTGCATTCCTAACCTGTCAATAACCATGGACCAATAACTCACTCATTGAAT  
[A, G]

GATTTCAGAAACAGGCCCCACATGATTTACCCAGATTTGGGAGAATGGTTAGATTACTGTC  
TAGATACTTTTTAACATAAGATTGTAATATCAATTGGCACAAAAATGAATATTAATTAAT  
TTAGACTTTTCATCTCCATATAAAGTGTGCTAATGCTATAGGACTTTTCTTCCAGCAATA  
CTTTCTTTAGCCTCATCCATATAGGGTAAGCCAGTACTCATTGTACATAAATTACTTAT  
GTAATGGCAGTACTCTTAAGATTGCAGATGCGGGTATTTTCAAAGCACTATTTGAAATAC

97449 ACGTTTTTTTATCATGTTGCATTCCCAACCTGTCAATAACCATGGACCCAATAACTCACT  
CATTGAATAGATTTCAGAAACAGGCCCCACATGATTTACCCAGATTTGGGAGAATGGTTAG  
ATTACTGTCTAGATACTTTTAAACATAAGATTGTAATATCAATTGGCACAAAAATGAATA  
TTAATTAATTTAGACTTTTCATCTCCATATAAAGTGTGCTAATGCTATAGGACTTTTCTT  
CCAGCAATACTTTCTTTAGCCTCATCCATATAGGGTAAGCCAGTACTCATTGTACATAA  
[A, G]

TTACTTATGTAATGGCAGTACTCTTAAGATTGCAGATGCGGGTATTTTCAAAGCACTATT  
TGAAATACATATTAGTAGACCTGACTATAAAAAGATTCTCTTGATTCAAACATCCATCA  
ATAAACTTTTAGCATCTTATTACCCTCAATGCAAGAGGTAGTTGGGTGGAGAGGTAGGAC  
TCAGAGATGATGTGGAGTTCCCGTAAAGAGAAAAAAGAACCAAGATGGGGCGAACTTC  
ACTGGCGGTGGGGAGAGACAGCACAAAGCCTTCCCTTCCCTATTCTTTCTGTTTTTAGA

98167 GAGCCCATGGGTAAGACTGTGAAAAAGAAGCTCTTGTCAAATCTAATAAGTGCAGTGGTG  
ATTCTTCCCACGCATTTCAGGTCTCGCTAAACTAGACATGCCCATGATGCTTGGTGTTC  
AGAAAAAGGTGGTATCACTTTTGTGAGAAATGAAATGAAAGTTCTGAGTGACCATGAA  
TTTCCTAAAATGTGTTAATATCCAAGAAACCTTAAACCGTTTATAAGGGGAGAAGGAAG  
AGAAGCAATGGAACAATGTTGCGAATTGTAGAGGGCTTTGAAATGAAGTTCTACTCCCT  
[A, G]

AAGCTCATAAGGTGGGGGAATGTACAAACTTTTAAAAAGTCTGTGAGTTCTTTGGTCAG  
TATGCTAATTTCTCTGCCACTCTCCCTCTTTTTCATATTTCTCACCAGGGTATGGGAATA  
TTGCTCCGAGCACTGAAGGAGGCAAAATCTTTTGTATTTTATATGCCATCTTTGGAATTC  
CACTCTTTGGTTTCTTATTGGCTGGAATTGGAGACCAACTTGAACCATCTTTGGGAAAA  
GCATTGCAAGAGTGGAGAAGGTGTTTCGAGTGAGTACTGTGTCATATTAAATTC TAACC

98430 AATTGTAGAGGGCCTTTGAAATGAAGTTCTACTCCCTAAAGCTCATAAGGTGGGGGAATG  
TACAAACTTTTAAAAAGTCTGTGAGTTCTTTGGTCAGTATGCTAATTTCTCTGCCACTC  
TCCCTCTTTTTTCATATTTCTCACCAGGTATGGGAATATTGCTCCGAGCACTGAAGGAGG  
CAAAATCTTTTGTATTTTATATGCCATCTTTGGAATTCCTACTCTTTGGTTTCTTATTGGC  
TGGAATTGGAGACCAACTTGAACCATCTTTGGGAAAAGCATTGCAAGAGTGGAGAAGGT  
[G, C]

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TTTCGAGTGAGTACTGTGTCATATTTAAATTCTAACCCTGCGATCCAATTGGCTTTAGC  
CTGACAGGATCCAGGAGGCAGTATCAGGGGCATTGTCTGCTTTTAAATGGAATAATTTAA  
TGTTATGATTGTATTTTCTGTTTGGCCAATGGAAGTCAAACATCTTGACCTAAACTC  
CCTTCTTTGAGTAGCTTCTATTTTAGAGTGATATTTCTGCAATCACAACACAAGAGGGT  
TAAGTATGGATTGGCCAACACAGATTTTTTGAAGAGGTGAGACAAGTTCAGTTTCTCCTT

98846 TTTAATGTTATGATTGTATTTTCTGTTTGGCCAATGGAAGTCAAACATCTTGACCTA  
AACTCCCTTCTTTGAGTAGCTTCTATTTTAGAGTGATATTTCTGCAATCACAACACAAG  
AGGGTTAAGTATGGATTGGCCAACACAGATTTTTTGAAGAGGTGAGACAAGTTCAGTTTC  
TCCTTCAAGATGGAAGATGGGGTTCCTCATTGTGTTTGAATGATGTAGAAAACCTGAAA  
TCCATCCATTTTGTGTTGGAACCTCCCTTACTCCGTTTTATTTTCAAGCACAGTGCTTC  
[T, C, A]  
GGCTAATCCTGCTTCTTCCAGAAGCCTGACTTCTCCAGACACTGCTCTGTGCTTTGCACC  
TGTTCTCCTAATGGTCTCTCTCTCTCCCATCTCTCACTGCTGAGTGTCCCTCAGAAATGG  
CATCCTGATGTACTACTTCTTACTGAACTGTTGATGATTGCTATTGCCTTAGTGGGTTTT  
TTCCTTTCTGGAATATTTATCTTTAAACAAGAGACAACATCTCAACTCAAGGAATTTAT  
TTACTAAAATTTAAATTAATTAATAAATTATTCCTGGCATTAGTTGCAGGCATGAGTGGC

99326 TTTCTTTCTGGAATATTTATCTTTAAACAAGAGACAACATCTCAACTCAAGGAATTTA  
TTTACTAAAATTTAAATTAATTAATAAATTATTCCTGGCATTAGTTGCAGGCATGAGTGG  
CTGAGTGATTAAACCGGGGTTCCCAATGCCCTTTAACTCGCACTCATTTGTATGCTTTCA  
CAGAACACCTGTTTTGCTCAGATGTAAGGTCACTTCTGCCCTCTTACTCACCGCTGACCT  
AATTTCTCAAGTCTTTCAAACCTTCCTCAGGGAATGCTTTCTTATGATGACTTAATATTTA  
[C, A]  
AAATGACATTCTGAGGTCTTTTCCAGGATCTAGGAATGGTGGCCAAAGGCAGATCAGCTG  
GAAGCTCTAAAGCTGTGCTTTTTTCCCCCTCTAAGAACTCTTAACTTTGAGTTCAAGGC  
TGTTCTCTGCAATAATGGCTCATACTTCTCTTTAGAAGAATGCAAGGGAGCTTTTCAAGTGA  
GCAGTTTCAGAGGCTTTTTTAAAAAGAGTAGAATGGGAGGAACGAGGCACCATAGCTGGGT  
GAGCCATTTTATAATCTCACTGATCCTGGGTGAGTGCCTCAGTTTACTCATCCACAAAA

99514 CTGTTTTGCTCAGATGTAAGGTCACTTCTGCCCTCTTACTCACCGCTGACCTAATTTCTCA  
AGTCTTTCAAACCTTCTCAGGGAATGCTTTCTTATGATGACTTAATATTTACAAATGAC  
ATTCTGAGGTCTTTTCCAGGATCTAGGAATGGTGGCCAAAGGCAGATCAGCTGGAAGCTC  
TAAAGCTGTGCTTTTTTCCCCCTCTAAGAACTCTTAACTTTGAGTTCAAGGCTGTCTCT  
GCAATAATGGCTCATACTTCTCTTTAGAAGAATGCAAGGGAGCTTTTCAAGTATGAGCAGTTT  
[C, T]  
AGAGGCTTTTTTAAAAAGAGTAGAATGGGAGGAACGAGGCACCATAGCTGGGTGAGCCATT  
TTATAATCTCACTGATCCTGGGTGAGTGCCTCAGTTTACTCATCCACAAAAGGGGATAG  
AATTTGAATCTACTTTGTGTCAGGTTTTTGGTGATGATTAAATGAAATGATGTGTGGAAGA  
GCTTGTCTATATAGGGCAGACATATAGAGCCAGGGCTTCTGTGTTTCTCTCAAGAGAAG  
CCCTCATGGGCAGGCTAGCCACTCATCCGGGTTTCATCTGAGGAGCTCTGTGGTGTGTGA

99680 TCAGCTGGAAGCTCTAAAGCTGTGCTTTTTTCCCCCTCTAAGAACTCTTAACTTTGAGT  
TCAGGCTGTCTCTGCAATAATGGCTCATACTTCTCTTTAGAAGAATGCAAGGGAGCTTT  
CAGATGAGCAGTTTCAGAGGCTTTTTTAAAAAGAGTAGAATGGGAGGAACGAGGCACCAT  
GCTGGGTGAGCCATTTTATAATCTCACTGATCCTGGGTGAGTGCCTCAGTTTACTCATC  
CACAAAAGGGGATAGAATTTGAATCTACTTTGTGTCAGGTTTTTGGTGATGATTAAATGAAAT  
[G, A]  
ATGTGTGGAAGAGCTTGTCTATATAGGGCAGACATATAGAGCCAGGGCTTCTGTGTTT  
CTCTCCAAGAGAAGCCCTCATGGGCAGGCTAGCCACTCATCCGGGTTTCATCTGAGGAGC  
TCTGTGGTGTGTGAGTTTTTACTGGAATGTCCACAGCCTTTGCTCCTTCATGCTGGCTGG  
CCGGTGGCCTCATTAGACTGTGCACCTGGGCTCCCCAGTAGTCTCCATGGAACCATCAG  
TGCTCAGCTTCCCTGCTTTTTCAGATGTTTAGTTCTTCTTAAACCAGACATAGCAGCCCTG

99879 AATCTCACTGATCCTGGGTGAGTGCCTCAGTTTACTCATCCACAAAAGGGGATAGAATT  
TGAATCTACTTTGTGTCAGGTTTTTGGTGATGATTAAATGAAATGATGTGTGGAAGAGCTT  
GTCTATATAGGGCAGACATATAGAGCCAGGGCTTCTGTGTTTCTCTCAAGAGAAGCCCT  
CATGGGCAGGCTAGCCACTCATCCGGGTTTCATCTGAGGAGCTCTGTGGTGTGTGAGTTT  
TACTGGAATGTCCACAGCCTTTGCTCCTTCATGCTGGCTGGCCGGTGGCCTCATTAGAC  
[T, C]  
GTGCACCTGGGCTCCCCAGTAGTCTCCATGGAACCATCAGTGTCTCAGCTTCCCTGCTTT  
TCAGATGTTTAGTTCTTCTTAAACCAGACATAGCAGCCCTGTCTCCAAGAACTCTTTTGA  
ACTTCTTGAAGCACCCTTTTAGCTGCTGCCTCATGGCCCTCTGACTTAGAGAAAAAGA

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ATCTGGTAGTTTGAACACTCAGAACAGGATTCAATTGGGGAAATGACTGATCTGGCATTT  
TTATTTTATGTAGCTTCTTTAGAGCTCAGTTTCCTTATTTGTAGAAGAAAGGATTGGAC

99971 AAATGAAATGATGTGTGGAAGAGCTTGTGATATAGGGCAGACATATAGAGCCCAGGGC  
TTCTGTGTTTCTCTCAAGAGAAGCCCTCATGGGCAGGCTAGCCACTCATCCGGGTTTCA  
TCTGAGGAGCTCTGTGGTGTGTGAGTTTACTGGAATGTCCACAGCCTTTGCTCCTTCA  
TGCTGGCTGGCCGCTGGCCTCATTAGACTGTGCACCTGGGCTCCCCAGTAGTCTCCATGG  
AAACCATCAGTGCTCAGCTTCCCTGCTTTTCAGATGTTTAGTTCTTCTAAACCAGACAT  
[A, G]  
GCAGCCCTGTCTCCAAGAACTCTTTGAACTTCTTGAAGCACCCTTTTAGCTGCTGCCT  
CATGGCCCTCTGACTTAGAGAAAAAGAATCTGGTAGTTTGAACACTCAGAACAGGATTC  
AATTGGGGAAATGACTGATCTGGCATTTTATTTTATGTAGCTTCTTAGAGCTCAGTT  
TCCTTATTTGTAGAAGAAAGGATTGACTAAAAGTTTGAATCCTCCTTAGCAGAAAA  
AATTCTAGTTACTATATTTGAAGTGATGGAAGAGGTTGCAATCATCTGGACATCTGCTAC

100895 TCCTGCAGCAGTTTGCTTGCTGCATGTAAGTTTGGTAGAAAATCTCAGTTTCTGCCA  
TTGATTTAACTACATTTAAAAGTCCAATTACGTTTAGGTGGTTATTTGAGAAATGAAAA  
TTGTATAAGCTAACAAAGCTTGGGGTTGTGAATTTTAGTTCTCATGGGGGAAGGTTTAT  
GTATTTCTTCTGCTCAATGAGTGTAAAGCCCTTCTCTGATCTGTTATGTTTTCTCTCAG  
CTCTTGGGAAGAGAGGATTTACGGTGGAGTAAAAATAAATCTAAAGTTGGCTTTCTGCC  
[G, A]  
GGCATGGTGGCTCACACCTGTAATCCTAGCAGTTTGGGAGGCTGAGGTGGGTGGATCACC  
TGAGGTGAGAAGTTCAAGACCCTCTGGCCAAGATGGTGAAACCCTGTGAGTACTAAAAA  
TACAAAAATTTGCAGGGCACGGTGGTGCATGCCTGTAATCCAGCTACTTGGGAGGCGGA  
GGCATTAGAATTGCTTGAACCCAGGAGGTGGAGGTTGCAGTGAGTTGAGATCGTGCCACT  
GCACTCCAACCTGGGTGACAGGGTGGAGCCCTGTATTAATCAATCAATCAATAAATAAG

100927 TTTGGTAGAAAATCTCAGTTTCTGCCATTGATTTAACTACATTTAAAAGTCCAATTAC  
GTTTAGGTGGTTATTTGAGAAATGAAAATTGTATAAGCTAACAAAGCTTGGGGTTGTGAA  
TTTTTAGTTCTCATGGGGGAAGGTTTATGTATTTCTCTGCTCAATGAGTGTTAAGCCCT  
TCTCTGATCTGTTATGTTTTCTCTCAGCTCTTGGGAAGAGAGGATTTACGGTGGAGTAA  
AAATAAAATCTAAAGTTGGCTTTCTGCCGGGCATGGTGGCTCACACCTGTAATCCTAGCA  
[G, C]  
TTTGGGAGGCTGAGGTGGGTGGATCACCTGAGGTGAGAAGTTCAAGACCCTCTGGCCAA  
GATGGTGAAACCCTGTGAGTACTAAAAATACAAAAATTTGCAGGGCACGGTGGTGCATGC  
CTGTAATCCCAGCTACTTGGGAGGCGGAGGCATTAGAATTGCTTGAACCCAGGAGGTGGA  
GGTTGCAGTGAGTTGAGATCGTGCCACTGCACTCCAACCTGGGTGACAGGGTGGAGCCCT  
GTATTAATCAATCAATCAATAAATAAAGTAAATATAAAGTTGGTCTTCAAGATGCCTGAA

102805 AAAATGAACAGGATTACATAATTGTTTTGAGCTAATTATCCTTGAATACAAGGATCAATA  
ACAAGGGTGATGCCAGTCCAAGTTGGACAGTCAGTTGCTGGGTAGATGTCTTCGCAGAA  
ATGCTTTTCTGCATAACGAGGTGATGGGTTTTGTGCAAGGTTGTAGTTTTCAGTCTTT  
TATGATAGCTCTTGTAAATCAGGCATTTGTGCATGAGAATCCTTCCTTCTGGCTTTCCCT  
GACTCTGTTTGTGAGAGTTTAAAGCACAAGTAACCCATTTTGATTCTGACAATTTTCAT  
[G, A]  
CTCCCAACACTCATTAACAATGGGTTAAGAATTTGAACCCTTATCTCACATAGCAAGAAG  
CCTGGAGGTACGTTGACTCAGGCTTGTGCTATCAGCTCCACAATGTCAGGTGTATCCAGA  
TTTGTTACCTCTTTCTGCTCTGTTTTCTTGGCATGGTAGCTCTTCATCCTCAGACTGT  
CACTCACATTGCAAGATGGCTGCTTCATGACCAAAATAGCACGTTTTACCCAACTCATA  
TCAGGAAATACAAAAGGAACCTCCCTTAAAATTTATCTTTTTTAGAGCAGTTGCATATTC

103462 CATGTGCAGTCTCCCTCATTATCAACATCCCGCACCAGACTGGTACATTTGTTACAATTT  
ATGAACCTACATTGATGCATCATTATCACCTAGAGTCCATAGTTTACATTAGGGTTCACT  
CTTGGTGTGTAGAGTCTATGAATTTGGACAAATTTATAATGACATGCGTCTACCATTAT  
AGTATCATACATAGTATTTCACTCTCCTAAAAATCCTCTGTACCCTGCTTGTTCATCAAT  
CCCGTTCTCCTAACCTTTGACAATGACTCATGTTTTATTAGTTTTGTCTTTCCAGAAT  
[G, T]  
TCATTAATATGGTTTGGCTGTGTCCCCACCCAAATCTCAACTTATATCTCCAGAATTCC  
CATGTGTTGTGGGAGGGACCCAGGGGAGGTAGTTGAATCATGGGGGCCAGTCTTTCCTG  
TGCTATTCTCATGATAGTGAATAAGCCTCACGAGATTGATAGGCTTATCAGGGGTTTCT  
GCTTTTGCTTCTTCTCATTTTTCTCTTGTGTCACCATGTAAGAAATACCTTTCACCTC  
CCACCATGACTCTGAGGCCTCCCCAGCCATGTGGAAGTGAAGTCCAATTAAGCCTCTTT

FIGURE 3, page 92 of 107

103811 TCCCAGAAATCCCATGTGTTGTGGGAGGGACCCAGGGGGAGGTAGTTGAATCATGGGGGC  
CAGTCTTTCCTGTGCTATTCTCATGATAGTGAATAAGCCTCACGAGATTGATAGGCTTA  
TCAGGGGTTTCTGCTTTTGCTTCTCCTCATTTTTCTCTTGCTGCCACCATGTAAGAAAT  
ACCTTTTACCCTCCACCATGACTCTGAGGCCTCCCAGCCATGTGGAAGTGAAGTCCAA  
TTAAGCCTCTTTTGTTCAGTTTCAGATATGCTTTATCAGCAGCGTGAAAACGGACT  
[G, A, T]  
ATACAGTTGTGTAGTTGGAATCATACTGTATGTAGCCTTTTCAGACTGGCTTATTCTACT  
TAAATATGGATAAAAAGTTTCTCTATGTCTTTTCATGGCTTGTAGTCCATTTCTGCTGGG  
TGGTGAATAATATTCCATTTCTGGGTGTACCATAGTTTATGTATCCATTACCTACTGA  
AGGACATCTTGTGCTTCTAAGTTTGGTAATTACGAATAAAGCTGATATAAACCTCTG  
TGCACAGGTTTTTGGTTGAACATTAGTTTTCAACTCCTTTAGTTAAATACAAAGATGTG

105461 CCTGTGCCATTTGTTGAAAAGACCTTTTTTTTTTCTCCATGTTGTCGCCTTTGCTCCT  
TTGTCAAAGGTAAAGTTGACTATATTATGTGGTTCTATTTTGGGCTCTCTATTCTAGTTC  
ATTGACCTATTTGCTATTCTTTCTCCAATATCATACTGTCTTGATTACTTTTCGCTCTAT  
AGTAATTGGAGACGGA  
GTCTCGCTCTGTGCCCCAGGCTGGAGTGCAGTGGCAGCATCTCGGCTCACTGCAAGCTCC  
[G, C]  
CCTCCCGGGTTACGCCATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGCGC  
CCGCCACTACGCCCGGCTAATTTTTTGTATTTTAGTAGAGACGGGGTTTACCCTTTTA  
GCCGGGATGGTCTCGATCTTCTGACCTCGTGATCCGCCCGCTCGGCTCCCAAAGTGCT  
GGGATTACAGGCGTGAGCCACCGCGCCCGGCCACGCTCTATAGTAATTCTTAAAGCCAGT  
TAGTGTCACTCCTCAATTTTTTCTTCTTTTCAATATTGTGTTGACATCAGCTCCTTT

105981 ATAGTAATCTTAAAGCCAGTTAGTGTCACTCCTCAATTTTTTCTTCTTTTTCAATAT  
TGTTGTGACATCAGCTCCTTTTATGGAAGAAAAATCTTCCAGAAGTTACCCTGTAGAT  
TTCCCTTCTGTCTCATTGACCAGAATGAGATCACATTAGCATCTGCAAGGGAGGATAGG  
AAAGGAAGTATCGGACAAAGGACGATAGTATTGCCATAATGGACCAGTGATTCTCAAAGT  
TTGGTCCCTCAACCTTAGGCATCAGTATCCCTGGACCATCGGCATCGGCATCCACTGGA  
[A, G]  
ACTTGTTAGAAATGAAAATTATTTTGGTTCGTGGTGGGGCGGTGGGGCTGGAGCTCAGC  
AATCTGTGTTTACCAAGCTGTCCAAGTGATTCCAATGCTTAAGGAGCAGAGGAATCATGT  
TTCATCTCTTGGGGCTGAACACATTGCTGTGATGAACAAAATTAGAATTCTGTTAGCGAA  
GAAGTTGGAGTAAGCAAATGATAACGTCTCACATAGATGTCAATTAAGTCTAGCCACTG  
AGATCACTCATAGAGAAGATGTCTTCACTCTTCTTGTCTATAAATTAGGTGGCTGTTGGG

106495 TAGATGTCAATTAACTGCTAGCCACTGAGATCACTCATAGAGAAGATGTCTTCACTCTTC  
CTTGTCTATAAATTAGGTGGCTGTTGGGATCCTTGAATCAATCAAGATAAGCTAGCCTATC  
ACAAACAGCCTACTCCCACTCCTGCCAGATCTGCTGCAACCCAGGCAGCTTCTCAGGCTC  
AGGGGCTAGATAGGGTGGGGGAAACAGCTGAGCGCTGCTTGTGCTGCTTTCAGAGCGTTG  
TCCCTCAGGTAGAGCCATTGGCCCCGAGCTAGTTACCAGGTCCCATTCGTAGCTGCAAG  
[G, T]  
GGGTTTGAATGCATTCTTTTATCTCCAAGAATAGTAGTGGATGGTAAAATTGTTGCGCA  
CTGCTATAGTCATGTTTCATATGCTCTAAGATGCACTCCTGGGTCCCACTCTAGGGTGACC  
AGCCTTTCAGGAATTTAGTTCAGGTCGTTTGTGCACTCACTCTTCGGGGGGAATACTACT  
ATTGTGAGACTCATAGATTTACACCTGAGAAAATGGAGCCTGTGAGGTGACTTGCCTGG  
ATCCACACAGTGAATTGGTGGTAGGACCTGGATTAGAACCCTAATCCTGCCTTAACCTC

107077 CTAATCCTGCCTTAACCTCTTCCAGATGGGCTGAAAATATTAATGTCAGATTAATCTACA  
CCATGAAACCAATGTGGAGTTTAGAATATTTTAGTATACCATACTAATTAAAGTAAAAAT  
AATTCTTCTGAGTTCCAGGGAAATATCTGGGCAGTTAGCATCCCAAATATCTGCTTAT  
TTGGGATGAAGGAGGGCTGACATTGGATTCTGAAGCAGGTTTGGGAAGCAGGCGGCTCT  
TTCTCCCCTGCTGTGGGGTAGCTGTCTTGTCTGGGCCAGGCTGATTATCACTTGATAGGAT  
[G, A]  
CTGTAGGAAAACAGTCAAATCTGGACTGATTCTCATTTTCTTGGCTCCAAGCTGGACT  
TTGGCCTCTGGTAGGAAGTACCTGCTTCTTTTTTCCGGCTCGGATCAGCAGGCTTTCTG  
GTATTTCTGTGTAACCAAGGGACACCTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGCTTT  
CCCCCGCCCCAAGGATATGGCAGAAATGTTTATTTGCTTATGGATCCAAATGATTCTGG  
GTGTCACTGACAAATAATAAACATTACCCTAGACTTACGAGTGCCAAAATTACTTGGAA

107431 CTGGACTTTGGCCTCTGGTAGGAAGTACCTGCTTCTTTTTTCCGGCTCGGATCAGCAGG  
CTTTCTGGTATTTCTGTAAAACCAAGGGACACCTTTTTTTTTTTTTTCTTTTCTTTTTT  
TGGCTTTCCCCCGCCCCAAGGATATGGCAGAAATGTTTATTTGCTTATGGATCCAAATG

ATTCTGGGTGTCACTGACAAATAATAAAACATTACCCTAGACTTACGAGTGCCAAAATTA  
CTTGGAATTTAGAACAGGCCACATGTTTAAAGATGGAAGTGATGACAATCTCAAAGTGC  
[T, G]

AATACGGTTAAATTAGTGGACTGATCAACCACTTTAGATTCCAGGAAGGGGCATGTGGCG  
GAAGCCAAAGACTCCTGCAGGCCTCTGCCATGTGCCTGGCATGGATCAAGGAGAGGCTTT  
TAAGAACACAATTGGCAGGAAGCTTCTGTTTCTCCCAAGGCATCTTTGAGCTAGCATTC  
GCAGCAAAGGGTTAACTTAAATAATTACTATTTCAAGAGGCAGGCGCAGTGGTCCACA  
TCTGTAATCACAGCTCTTTGGGAGGCCAAGACAGAAGGATTACTTGAGCCCGGGAGTTCA

107671 CTTGGAATTTAGAACAGGCCACATGTTTAAAGATGGAAGTGATGACAATCTCAAAGTGC  
TAATACGGTTAAATTAGTGGACTGATCAACCACTTTAGATTCCAGGAAGGGGCATGTGGC  
GGAAGCCAAAGACTCCTGCAGGCCTCTGCCATGTGCCTGGCATGGATCAAGGAGAGGCTT  
TTAAGAACACAATTGGCAGGAAGCTTCTGTTTCTCCCAAGGCATCTTTGAGCTAGCATTC  
AGCAGCAAAGGGTTAACTTAAATAATTACTATTTCAAGAGGCAGGCGCAGTGGTCCAC  
[A, G]

TCTGTAATCACAGCTCTTTGGGAGGCCAAGACAGAAGGATTACTTGAGCCCGGGAGTTCA  
AGACCAGCCTGGGCAACATAGTGAGACCCCATCTCTGAAAAAAGAAAAATCGAGCCC  
GGGCGTGGTGGCTCATGCCTGTAATCCAGCACTTTGGGAGGCAGAGGCAGGCAGATCAC  
TTGAGGTCAGCAGTTTGAGACCAGCCTGGCCAACATGATGAAACCCGTTCCTACTAAAA  
ATACAAAATTAGCCTGGCATGGTGGTGTGTGCTTATAGTTCTAGCTACTCGGGAGGCTG

108826 CCATATGTCTCTGGAGTATCTGCTTCTATGTGCCTGCCCTAGTACATACCATATTAT  
AAGTTCCTAACAACTAACTCAGTAGGATTAATGTTACATAATAATGTGAGTTTATTTATT  
TATTTATTGAGACGGAGTCTCACTCTGTTGCCAGGCTGGAGGGCAGTAGCATGATCTCG  
CCTCACTGCAACCTCCGCTCTTGGGTTCAAGCGACTCTCCTGCCTCAGCCTCCTGAGTA  
GCTGCGGTACAGGCGGTGCCACCATGCCTGGCTAATTTTGTATATTTTAGTAGAGA  
[C, T]

GAGGTTTACCATATTGGCCAGGCTGGTCTCGAACTCCTTACCTCGTGATCTGCCACCT  
TGGCCTCCCAAAGTCCGGGATTACAGGCATGAGCCACCACGCCCTGCCGTGAGTTTATT  
TTTATCAGAGAGAAGGCCCTGGTTTAAATGTAACAATTGCTTTCTTCTTTTCCCTAGGC  
GGCAAGAAGGTAGGAAGTAATTATTTGAAAATGCAAATAATTTTAAAGCTTTATCAATCA  
AGTCTGTTCCAAATTAGTTTAAAGATTCTTGTAGCTTAAATGATAGGGCCAGAATGTAC

111310 TAAAAGGATTTTAGTTTTCTGACTTCATGCTCTCTCTCAGTGTGTTGAATTGCATCATAG  
CCTCTGGTTCTTTATGTATCTGCTTTAGTTCCTAATACCAGCTCATTATTAGTTAATAT  
CTCTTTCTTTGTGTTCTCTTTCTTGGAGGTTAATCTAAGATTTAGGTGTCCCCTTGCTC  
ATGCTCTGCTATGTGACTAATACAAAGATGGGTTTATATTCTGGTATCACTATAGGAC  
ATTAAGTAATGTCAAAAACCACAATTACTTTTGTACCAACCTAATAAAGAGGGGCCT  
[T, A]

TACTGTACCAATAGCTGACTTGTTTTGACCCACCTCTGCGAGAGCAGTTGCCAGGCAAAG  
ATAGTCCCCACTCTGTTCTTCCATCCACTGCTCTACTTTGTACAACCTGCTTAATGTTAA  
AAACAGGAGGAAATGCACAGCTCAAAGCCAAGCCTCTGGTGGCCTGAGATAGCTGGCCT  
TGCTCTCCAAGCATTTCTTTTCTGGGCTCATCAGAATGCCCTCAATGCTCTGCTCG  
ATGGTTTTAAGAGCATAGAGTGGCTTGGTGTGGTGAATCAAGCCTGTAATCCAGCACTT

112035 CCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGCA  
GTGAGCCAAGATCACACCACTGCACTCCAGCCTGGGCAACACGAGTGAAACTCTGTCTCA  
GTAATAATAATAATAATAATAATAATAATAATAATAATAATAATAAAGTAAAAATAAAAG  
AGCATAGAGTTTGAGACCATCACCAAGATTTTAAATCCCACTGGGGATTAACTCAG  
TCCTAAACTCAAGTCTGCTATGTCAAGTAGTATTAATATCTCTCTCTTTAAGAGCCA  
[T, -]

TTAGCTCTTTCTCATATCTTTTCAAGATTTTGTGCTGGTTTTCCCTAAGGCTTCTGAACTCT  
TAAAACATCTCTGATAGAGGAACTATCTAGAAAATTTATGGGTATTCAATTATCAGTGA  
GGTCTTTCTCATTGAAGAGATAATCACTTCTTAGAATCCAGGGGTTTCATTAAAGTATTA  
ATAAAGGTTTTATATTTTGCATTTTGGGCTAGTGAAAGTCTAGTGATGCTTTAGGTC  
TACAACATGGTAACTGTATTTAAGATTCCAGGTGCTTTTGAAGTTATGAATTTAATGCA

112038 AGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGCAGTG  
AGCCAAGATCACACCACTGCACTCCAGCCTGGGCAACACGAGTGAACTCTGTCTCAGTA  
ATAATAATAATAATAATAATAATAATAATAATAATAATAATAAAGTAAAAATAAAAGAGC  
ATAGAGTTTGAGACCATCACCAAGATTTTAAATCCCACTGGGGATTAACTCAGTCC  
TAACTCAAGTCTGCTATGTCAAGTAGTATTAATATCTCTCTCTTTAAGAGCCATT  
[T, -, A]

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GCTCTTTCCTCATATCTTTCAGATTTTGCTGGTTCCTTAAGGCTTCTGAAACTCTTAA  
AACATCTCTGATAGAGGAACTATCTAGAAAATTTATGGGTATTCATTATCAGTGAGGT  
CTTCTCATTGAAGAGATAATCACTTCTTAGAATCCCAGGGGTTTCATTAAGTATTAATA  
AAAGGTTTTATATTTTGCATTTTGGGGCTAGTGAAAGTCTAGTGATGCTTTAGGTCTAC  
AACATGGTAAACTGTATTTAAAGATTCCAGGTGCTTTGAGTTATGAATTTAATGCAAGA

112066 TCACTTGAACCTGGGAGGCGGAGGTTGCAGTGAGCCAAGATCACACCACTGCACTCCAGC  
CTGGGCAACACGAGTGAAACTCTGTCTCAGTAATAATAATAATAATAATAATAATA  
TAATAATAATAATAAAGTAAAAAAGAGCATAGAGTTTGAGACCATCACCACCAAGA  
TTTTAATTTCCCACTGGGGATTTAACTCAGTCCTAACTCAAGGTCTGCTATGTCAAGTAG  
TATTAAATATCTTCTCTTTTAAAGAGCCATTTAGCTCTTTCCTCATATCTTTCAGATTTT  
[G, T]  
CTGGTTTTCCCTAAGGCTTCTGAAACTCTTAAACATCTCTGATAGAGGAACTATCTAG  
AAAATTTTATGGGTATTCATTATCAGTGAGGTCTTCTCATTGAAGAGATAATCACTTCT  
TAGAATCCCAGGGGTTTCATTAAGTATTAATAAAAGGTTTTATATTTTGCATTTTGGGG  
CTAGTGAAAGTCTAGTGATGCTTTAGGTCTACAACATGGTAAACTGTATTTAAAGATTCC  
AGGTGCTTTTGAGTTATGAATTTAATGCAAGAATTCTATTAGCAATCACATTTTACTAG

114098 AAGTTGAGATCACTGGTCTTTCAAGTTAGCATCAATTTCCATGACATTCTGGGCTTTCTT  
TTTTCTGTGGATTAAACATTTTCATCCTGGCCATAGTCATTGTTACAAAGATTTTTTTTT  
TTTTTTTTTGAGATGAAGTCTAGCTCTGTTGCCAGGCTTGACTGCAATGGCACAGATCTC  
GGCTCACTGCAACCTCTGCCTCTCAGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGT  
AGCTGGGATTACAGGCACCTGCCACTGCCCTGGCTAATTTTTGTATTTTGTAGTAGAGACG  
[G, A]  
GGTTTACCATTTTTGTCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTC  
GGCCTCCCAAAGCACTGGGATTACAGCCGTGAGCCACCGCGCTGGCCAGAAGTTTTCTT  
TTCTCTAAGTTACTCCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCT  
TTATGCCTTTTTTAAATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTT  
AAGTGACAGTTCACTGGCATTAAAGTACATTACATTGTTGTGCAACCATCACTACCATC

114293 CTGCCTCTCAGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGG  
CACCTGCCACTGCCCTGGCTAATTTTTGTATTTTGTAGTAGAGACGGGGTTTACCATT  
GTCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTCGGCTCCCAAAGCA  
CTGGGATTACAGCCGTGAGCCACCGCGCTGGCCAGAAGTTTTCTTTCTCTAAGTTAC  
TCCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCTTTATGCCTTTTTTT  
[A, -]  
ATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTTAAAGTGACAGTTTCA  
TGGCATTAAAGTACATTACATTGTTGTGCAACCATCACTACCATCATCTCCAGAATTTT  
CCATCTTCCCAAATGACAACCTCTGAGTCTGTTCAATAATAACTGCTCATTTTCTCTCCCC  
CAGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTATGAATTTCACTACTCCGGGAAC  
CTCATGTCAATGGAGTCATATAGTGTGTCCTTTTGTGTCTGGCCTATTTCACTTAGCA

114413 GTCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTCGGCTCCCAAAGCA  
CTGGGATTACAGCCGTGAGCCACCGCGCTGGCCAGAAGTTTTCTTTCTCTAAGTTAC  
TCCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCTTTATGCCTTTTTTT  
AATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTTAAAGTGACAGTTCA  
GTGGCATTAAAGTACATTACATTGTTGTGCAACCATCACTACCATCATCTCCAGAATTTT  
[-, C, T]  
CCATCTTCCCAAATGACAACCTCTGAGTCTGTTCAATAATAACTGCTCATTTTCTCTCCCC  
CAGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTATGAATTTCACTACTCCGGGAAC  
CTCATGTCAATGGAGTCATATAGTGTGTCCTTTTGTGTCTGGCCTATTTCACTTAGCA  
CAGTGTCTTTAAGGCTTCATGAATATTGCACATGTGTGAGAATTTCTTCTTTTCAAGGC  
TGAGTAATATCCCCCTGTCTGTATATACCACATTTTGCCTATTTGTTTATCTGTTGATGG

114414 TCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTCGGCTCCCAAAGCAC  
TGGGATTACAGCCGTGAGCCACCGCGCTGGCCAGAAGTTTTCTTTCTCTAAGTTACT  
CCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCTTTATGCCTTTTTTTA  
ATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTTAAAGTGACAGTTTCA  
TGGCATTAAAGTACATTACATTGTTGTGCAACCATCACTACCATCATCTCCAGAATTTT  
[-, C]  
CATCTTCCCAAATGACAACCTCTGAGTCTGTTCAATAATAACTGCTCATTTTCTCTCCCC  
AGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTATGAATTTCACTACTCCGGGAAC  
TCATGTCAATGGAGTCATATAGTGTGTCCTTTTGTGTCTGGCCTATTTCACTTAGCAC

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AGTGTCTTTAAGGCTTCATGAATATTGCACATGTGTGTCAGAAATTCCTTCCTTTCAAGGCT  
GAGTAATATCCCCCTGTCTGTATATACCACATTTTGCCTATTTGTTTATCTGTTGATGGA

114692 TACCATCATCTCCAGAACTTTTCCATCTTCCCAAATGACAACCTCTGAGTCTGTTCAATAA  
TAACTGCTCATTTCTCTCCCCCAGCTCCCTGGTGACCACCATTCTACTTTCTGTGTCTA  
TGAATTTCAACCACTCCGGGAACCTCATGTCAATGGAGTCATATAGTGTGTTGTCCTTTGT  
GTCTGGCCTATTTCACTTAGCACAGTGTCTTTAAGGCTTCATGAATATTGCACATGTGTC  
AGAATTTCTCTCTTTCAAGGCTGAGTAATATCCCCCTGTCTGTATATACCACATTTTGC  
[C, T]  
TATTTGTTTATCTGTTGATGGACTTTTGGGCTGTTTCCACTTTTGGTTGTTATGAATAA  
TGCTGCTATGAACATGGGTGTATAAACATCTATTCAAGTCCCTGTTTTAATTATTTGG  
ACATATACCCAGCAGTGGAATTGCTGAGTCACATATAATTACAGATTTAATTTTTCTGAG  
GAACCGTGACACTGTTTTCTACAGTGGCTGCACCATTTCACATTTCCACCAACAATGCCC  
AGGGATTCTGTCTTTCCACTTCCTCACCACACTTGCTTTTTTCTGTTTTTTTTTTTTTT

115696 GGTCAACTTGATAAACAATTATCGAATAACACTTTTTTGTGTGTGTTCTCAACACTATAG  
GGATATGTGGCAATAAACAAGGATAGTCCTTTCTCTTAAGGAGAAAACAGCCATGCATC  
AAGACCAGTGTCCATAATATTGTGCGAATGATACCAGGGCTAGGGCAGGCAGGCTCTGA  
AGTCACACCACCTTGGGTGAATGATCCATGCTATGTCTACTTCTTATCAGCTATGTGACC  
TCAGGCTGTGCCTCAGTTTTCTTATTGAAAAAATGAGGATAATAATGGTTCTGTCTGT  
[A, T]  
TTGGCACTTAGTTGACACTTGAGAGCAGTGTCTGCCACATAGCCTCAATCAATGCTATTCT  
ACTATTATTGTAGAACACTGTTAGCTATGGGAGCCCAGAGAGGGACTTGTTAAGTCTAGC  
TTGTATATTTTACATCACACAAGCACTGCCTTGTCTTGCCAATGGATTGTTCTGTCTCAA  
GTAAAGCATAGGGGCTTAAAGCTAAATGTTACTGTGCCTTTATTGGCCTGTATCCCTGTA  
GGACCTGCTCAGTGCTAAGTGCTTTGGAGGTGTTTCAAGTAATATTATTGATTGTGAATT

116153 TTGCCAATGGATTGTTCTGCTCAAGTAAAGCATAGGGGCTTAAAGCTAAATGTTACTGTG  
CCTTTATTGGCCTGTATCCCTGTAGGACCTGCTCAGTGCTAAGTGCTTTGGAGGTGTTCA  
GTAAATATTTATTGATTGTGAATTGATTAGAGAGGAGAGAGACACGAACCAGGTCTTTTT  
CCAAGCACCCAGGATGTGTAAGCTTCACAAATGAAGAGATGCTTGCTGATGCTGCCCTCT  
GTCTTACCCTTCTTGAAATGGGCATGGAGGTGGGTGGGGCTGGAGAAGTGGAGGGGGCC  
[A, C]  
CAGAAAGGGTAGCGACAGAGAGAAAGAAACCCATGGGCAACAGGGTCTGTATCTGGGACG  
GGACCTCAGCCATCAAGCATGGCCTTGGGAGGAGAAGATGCACTGGCCGCGATGCAGCGA  
GCCCTTTCGAAAGGCAACAGCACAAGCAAGAGTGCAGACGGCAGGTTTCGTGGCTCCTC  
TGGGGCTCCCCCAGGGGATGCCGTTGCCATTTCGGTCTGCGTGAAGGAGGCAGGTTGCTT  
CTTCGTCGTCGGCCACACTTCACTGGCTGCAAGTGTTACGCAGATGTGCTCATGTGATC

116213 CCTTTATTGGCCTGTATCCCTGTAGGACCTGCTCAGTGCTAAGTGCTTTGGAGGTGTTCA  
GTAAATATTTATTGATTGTGAATTGATTAGAGAGGAGAGAGACACGAACCAGGTCTTTTT  
CCAAGCACCCAGGATGTGTAAGCTTCACAAATGAAGAGATGCTTGCTGATGCTGCCCTCT  
GTCTTACCCTTCTTGAAATGGGCATGGAGGTGGGTGGGGCTGGAGAAGTGGAGGGGGCC  
ACAGAAAGGGTAGCGACAGAGAGAAAGAAACCCATGGGCAACAGGGTCTGTATCTGGGAC  
[G, A]  
GGACCTCAGCCATCAAGCATGGCCTTGGGAGGAGAAGATGCACTGGCCGCGATGCAGCGA  
GCCCTTTCGAAAGGCAACAGCACAAGCAAGAGTGCAGACGGCAGGTTTCGTGGCTCCTC  
TGGGGCTCCCCCAGGGGATGCCGTTGCCATTTCGGTCTGCGTGAAGGAGGCAGGTTGTCTT  
CTTCGTCGTCGGCCACACTTCACTGGCTGCAAGTGTTACGCAGATGTGCTCATGTGATC  
TTACCACATACGCAGATTCTAGTAAAAAAGAAGAAAAAATCCAAGAATGAGTGAGAATT

116507 TGGGACGGGACCTCAGCCATCAAGCATGGCCTTGGGAGGAGAAGATGCACTGGCCGCGAT  
GCAGCGAGCCCTTTCGAAAGGCAACAGCACAAGCAAGAGTGCAGACGGCAGGTTTCGTG  
GCTCCTCTGGGGCTCCCCCAGGGGATGCCGTTGCCATTTCGGTCTGCGTGAAGGAGGCAGG  
TTGTCTTCTTCGTCGTCGGCCACACTTCACTGGCTGCAAGTGTTACGCAGATGTGCTCA  
TGTGATCTTACCACATACGCAGATTCTAGTAAAAAAGAAGAAAAAATCCAAGAATGAGT  
[G, A]  
AGAATTTATTTTAGCTACATGCTGACTGCCTCTCAGCTTGCCGCTCTTACCAGATCT  
TGAAAAACAAGGGCCAGTTTGTATTTTATAAAAAATGCATCAAAGTGTTACTAAAAGATCC  
TAAAGGAAGACTAAAGTTTCTCCGAAAAAGAAGCCTGGCCCTTCAAATACCAACAAGGGA  
TCCTCGGAAGATGGGTTTTACTGAGCTCAAACACTGTCTCTTCTGTTTAGATACTGTATT  
ATTACATCATTTCCCTCTCAGATTGAGTGATGTTTCTCCATTATTTGTTCCGTTCCCTT

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116796 CAAGAATGAGTGAGAATTTATTTTAGCTACATGCTGACTGCCTCTCAGCTTGCCCGTGCT  
CTTACCAGATCTTGAACAAGGGCCAGTTTGTATTTTATAAAAAATGCATCAAAGTGTT  
ACTAAAAGATCTTAAAGGAAGACTAAAGTTTCCGCCGAAAAGAAGCCTGGCCCTCAAAT  
ACCAACAAGGGATCCTCGGAAGATGGGTTTTACTGAGCTCAAACACTGTCTCTCTGTTT  
AGATACTGTATTATTACATCATTTCCCCTCTCAGATTGAGTGATGTTTCTCCATTATTT  
[G, T]  
TTCCGTTCCCTTGGCAGAAGTGAATTTACCATGAACAACATCTGCAGTCTTTCTATACGA  
GCCTGGGGAATGCTTGAAGAAGTACTATAAATTATTATTATTAATATTTGTTTGTCTA  
CCTATCCACTCCCCACCCCAAGTCCCCTCTCACTCCCGAGTAGTCACAAATGGGTGTAT  
CGGGCATCTCGTCTCAGTTGTGAGGACTGTCCCTTCTCATTCTAAACTATTTTGCAGATT  
AGCTTGAGCAATTAGAATCAGGAATAGATATCATGTGGTTAAAAATAAAGGAATTTATC

117142 AGTCTTTCTATACGAGCCTGGGGAATGCTTGAAGAAGTACTATAAATTATTATTATTA  
ATATTTGTTTGTCTACCTATCCACTCCCCACCCCAAGTCCCCTCTCACTCCCGAGTAGT  
CACAAATGGGTGTATCGGGCATCTCGTCTCAGTTGTGAGGACTGTCCCTTCTCATTCTAA  
ACTATTTTGCAGATTAGCTTGAGCAATTAGAATCAGGAATAGATATCATGTGGTTAAAT  
AAAAGGAATTTATCTACAATTTGAAAATAGATTACAGAGAACTTCCATGTGATTTTTTT  
[T, A]  
AAAAAATAAATTTTGTCTGTGTACTATAACAGAGTTGGCACCAGAGCTAACAAAAAAG  
CAAGTATCAACATTTAAATGCAGTACATGACATGTAATGCCATATGGTATTCTTGCAA  
TGTTATTACCCTTTCTTTCTGGCATCCTTTTCTGACATTGCTGTATGCTTCTTGACTC  
TGCTGCTCTTCAGAAAGCCTCAATTGTCCTGAGCCCTTAATTCTGTATTTATATTAGGT  
GTCTCTCTCTTTATCTACCCTTTGGAGGCTTATCAACCTTTTCCCAAGGAAGAGGAAG

118270 GCAAATAACATCTTGTAGACCCCAAGAATAACATTCATCTCACTGTATTGATGGTGGGCA  
TCCCCATCAGCCTATGAGTTGTGTGAGGTCTGGGTCCCCTCTGCCTGTTCACTGCATC  
TTCAGGTGCTAGCACATGGCCTGGAACCCAGAGAGCACTTAATCCATACTTGATGAATCA  
ATGAATGAACATTGCTAGACATAACCTTATACATCTTGATATAGAAAATGACCTTGAAGC  
TGGACTAGGTCCCAGTTACTTGAGAGGCTGAGGCTGGAGGATCAGCCAGCTTGGGCAGC  
[G, C, A]  
TAGTGAGACATCCCCCTATCCCTCCTACTCTCCTAATCCTGCACAATCCCCCTCTAAAAA  
AGATAAACAGAGTGACCTTGGGCTGGCGCTGTGGCTCGCGCCTGTAATCCAGCACTTTG  
GGAGGCTGAGGCGGGCGGATCATGAGGTGAGGAGATCGAGACCCTTGGCTAACATGGT  
GAAACCCCGTCTCCTCTAAAAAATACAAGAAAATTAGCCGGGCGGATGGCGGGCCCTG  
TAGTCCCAGCTGCTCGGGAGGCTGAGGCAGGAGAATGGCGTGAACCTGGGAGGCGGAGCT

118495 AAATGACCTTGAAGCTGGACTAGGTCCCAGTTACTTGAGAGGCTGAGGCTGGAGGATCAG  
CCCAGCTTGGGCAGCATAGTGAGACATCCCCTATCCCTCCTACTCTCCTAATCCTGCACA  
ATCCCCCTCTAAAAAAGATAAACAGAGTGACCTTGGGCTGGCGCTGTGGCTCGCGCCTG  
TAATCCCAGCACTTTGGGAGGCTGAGGCGGGCGGATCATGAGGTGAGGAGATCGAGACCA  
TCTTGGCTAACATGGTGAAACCCCGTCTCCTCTAAAAAATACAAGAAAATTAGCCGGGCG  
[C, T]  
GATGGCGGGCCCCCTGTAGTCCCAGCTGCTCGGGAGGCTGAGGCAGGAGAATGGCGTGAAC  
CTGGGAGGCGGAGCTTGAGTGAGCCGAAATTGCACCACTGCACCTCCGGCCTGGGCGACA  
AAGTGAGAATCTGTCTCAGAAAAAAGAGAGTGACCTTGAATCGAA  
ACTAGTATTGTATGCAATAAATGGCAATGGGGAAAAAAGTTCTTAGGCTTTGAAGTCC  
AATTATTTTGAATAAAGATGGGTCTGTAGGGAGCTGCTCCCTGCTAATGCTTATTGCCA

119314 AGATAATTCTGAAAAATTCAATGCAAAATTTCTAGCTATAATATAAAGGAGAAATAAATG  
GAAAGTAATGTTTTCAATAATAGGTGCTCTGTTATGAAACCCTAGGAGACCTGCTGAAGCA  
GTGAGTCTTGGCATCTATACGTAGAATGCAATATCTCCAAATGCAGATTGGTTCAGGTAT  
GTTGTGTTGATGACTAAGATGTCACAAAGGACTTTTTCTCCAGTGGTGTGGTTTTCCAAA  
ATAGAGAACAACCTCTCAGCAAGGTCCAGCTAATCTATTTACATTAGAGTCAGATTCTTA  
[A, T]  
AAAAATTTGGTCAACTTTGAAAAGATGCAACAATTTGTGTGTGTCTTACATGTAAAA  
GGGAGTTAGGTTCTTGGCTCAGATAATTGTAGACATGAGTTTTTCTCAGTGGGACATCA  
AAGCTCATGCTTAAATGTGGGATGGTTCTGTGATTTGTGGCACTGATTGTTGTATTGCAGG  
ACATCTGAACGTCTTTGACCTCCTCCAGTACATGCCAAACGTGCCCTCCAGTTGTGAC  
AACCAGAAACACCCTAACAAGTTTAGAGACCACCTCCTAGGGTGTGTAATCTAACAGG

119740 CATGCTAAATGTGGGATGGTTCTGTGATTTGTGGCACTGATTGTTGTATTGCAGGACATC  
TGAACGTCTTTGACCTCCTCCAGTACATGCCAAACGTGCCCTCCAGTTGTGACAACCG  
CAACACCCCTAACAAGTTTAGAGACCACCTCCTAGGGTGTGTAATCTAACAGGGTTAT

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AAACAGAGCTTCCAGGGGGCTCCCATGTAACTTTCAAGAATTACATATTTAATTTCTAT  
TCTCGTGAAAAATGGCCATGTTCCAATAGTTAAGCCTCTTCCCTTGATGTATTTCCCATGC  
[T, C]

ATTAATATTCAGTTCTATTCCACAAATATTTATTATATGCATATGTGTGTGTACATCCAT  
CTGACTATACCTTTCTATGTTATGTACCTTTACTAGAATTCCAAATTATAAAATCCTGTC  
AGTTTATCTCTTGCTAGATGAATGGTTTTATTGTTTTTGTAGAATATTTGCTTTAAACAG  
TACTCTCATATTTCTTGAGGTGCTAAAATAGAGGAGGCAGCTGTAGAAAAATGCACTAC  
GGGCCAGGCGTGGTGGCTTATGCCTATAATCCCAGTACTTTGTGAGGCCAATGTGGGCGG

119899 TTGTAATCTAAACAGGGTTATAAACAGAGCTTCCAGGGGGCTCCCATGTAACTTTCAAGA  
ATTTACATATTTAATTTCTATTCTCGTGAAAAATGGCCATGTTCCAATAGTTAAGCCTCTT  
CCCTTGATGTATTTCCCATGCCATTAATATTCAGTTCTATTCCACAAATATTTATTATAT  
GCATATGTGTGTGTACATCCATCTGACTATACCTTTCTATGTTATGTACCTTTACTAGAA  
TTCCAAATTATAAAATCCTGTCTAGTTTATCTCTTGCTAGATGAATGGTTTTATTGTTTTT  
[G, A]  
TAGAATATTTGCTTTAAACAGTACTCTCATATTTTCTTGAGGTGCTAAAATAGAGGAGGC  
AGCTGTAGAAAAATGCACTACGGGCCAGGCGTGGTGGCTTATGCCTATAATCCCAGTACT  
TTGTGAGGCCAATGTGGGCGGATCATGAGGTCAAGAGATTGAGACCATCCTGGCCAACAT  
AGTGAAACTCCATCTTACTAAAAATACAAAAATTAGCTGGGCATGGTGGTGCATGCCTGT  
AGTCCCAGCTACTCGGGAGGCTGAGGCAGAAGAATCACTTGAACCCGGGAGGCAGAGGTT

119990 ATGGCCATGTTCCAATAGTTAAGCCTCTTCCCTTGATGTATTTCCCATGCCATTAATATT  
CAGTTCTATTCCACAAATATTTATTATATGCATATGTGTGTGTACATCCATCTGACTATA  
CCTTTCTATGTTATGTACCTTTACTAGAATTCCAAATTATAAAATCCTGTCTAGTTTATCT  
CTTGCTAGATGAATGGTTTTATTGTTTTTGTAGAATATTTGCTTTAAACAGTACTCTCAT  
ATTTTCTTGAGGTGCTAAAATAGAGGAGGCAGCTGTAGAAAAATGCACTACGGGCCAGGC  
[G, A]  
TGGTGGCTTATGCCTATAATCCCAGTACTTTGTGAGGCCAATGTGGGCGGATCATGAGGT  
CAAGAGATTGAGACCATCCTGGCCAACATAGTGAAACTCCATCTTACTAAAAATACAAAA  
ATTAGCTGGGCATGGTGGTGCATGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGAA  
GAATCACTTGAACCCGGGAGGCAGAGGTTGCAGTGAGCCGAGGTACGCCATTGCACTCC  
AGCCTGGGTGACAGAGTAAGACTCCATCTCAAAAAAAAAAAAAAAAAAAGAAAAGAAAA

120169 TCTTGCTAGATGAATGGTTTTATTGTTTTTGTAGAATATTTGCTTTAAACAGTACTCTCA  
TATTTTCTTGAGGTGCTAAAATAGAGGAGGCAGCTGTAGAAAAATGCACTACGGGCCAGG  
CGTGGTGGCTTATGCCTATAATCCCAGTACTTTGTGAGGCCAATGTGGGCGGATCATGAG  
GTCAAGAGATTGAGACCATCCTGGCCAACATAGTGAAACTCCATCTTACTAAAAATACAA  
AAATTAGCTGGGCATGGTGGTGCATGCCTGTAGTCCCAGTACTCGGGAGGCTGAGGCAG  
[A, G]  
AGAATCACTTGAACCCGGGAGGCAGAGGTTGCAGTGAGCCGAGGTACGCCATTGCACTC  
CAGCCTGGGTGACAGAGTAAGACTCCATCTCAAAAAAAAAAAAAAAAAAAGAAAAGAAA  
AGAAAAGAAAAATGCACTGTGCCAGGCATTTAGAACATTGAGATGAAGGAGCACACTGTG  
TAGTAGGGAGACACATGGATTGGATGGACAGACAGTGATGCAGGTTGAGCAGTTCTATGGA  
CAGGGGACCATGCAAGGGTGAAGGAACATGGACAGCAGAGAGCAAGAACTGGAGAGGGCT

120519 CCATTGCACTCCAGCCTGGGTGACAGAGTAAGACTCCATCTCAAAAAAAAAAAAAAAAAA  
AAGAAAAGAAAAGAAAAGAAAATGCACTGTGCCAGGCATTTAGAACATTGAGATGAAGG  
AGCACACTGTGTAGTAGGGAGACACATGGATGGATGGACAGACAGTGATGCAGGTTGAGC  
AGTTCTATGGACAGGGGACCATGCAAGGGTGAAGGAACATGGACAGCAGAGAGCAAGAAC  
TGGAGAGGGCTTCTGCAAGAGGTAATGTGAGAATTGTGTGTGAGGAATGAACAGGAGTC  
[C, T]  
GACAAGCATTAAAAAGGGCGAAGAACCTTATCCTAGCAGATGGAACAGCCCTTAAAAGGG  
CACAGAAGCTAAAAAGAAATGAGCTATGAAGCCATGAGAAGATGTAGAGGAATGCTAAAT  
GCATATTGCTGCGTGAAGAAGCCAATCTGAAAAGGCTACATGCAGTATGATTCCAACTA  
CATGACATTCTAGAAAAGTCTAAACTATGGAGACAGTTACAAAGATCCATGATTGCCAAG  
AGCCTGGGGGAAGAGAGGGATGAATCGGTGGAGCAGAGAGGATTTTATGGCTAGGGAAAC

120812 AGGAGTCCGACAAGCATTAAAAAGGGCGAAGAACCTTATCCTAGCAGATGGAACAGCCCT  
TAAAAGGGCACAGAAGCTAAAAAGAAATGAGCTATGAAGCCATGAGAAGATGTAGAGGAA  
TGCTAAATGCATATTGCTGCGTGAAGAAGCCAATCTGAAAAGGCTACATGCAGTATGAT  
TCCAACTACATGACATTCTAGAAAAGTCTAAACTATGGAGACAGTTACAAAGATCCATGA  
TTGCCAAGAGCCTGGGGGAAGAGAGGGATGAATCGGTGGAGCAGAGAGGATTTTATGGCT  
[A, G]

GGGAAACTATTGTGTATGATACTATAATGGTGGATACATGTCATCAGACGTTTGTCCAAA  
 CCCATAGGATGTACAGCACCAACAGTGAACCCTAATGTATACTATGGATTCTGGATGATA  
 TTGTCAGTATAGGCTCATCATTGTAACCAGTGCCTACTCTGGCATGGGATGTTGATAG  
 TGGGGAAGGCTGTGCATGTTTGGGGCGGGGGCTATATGGGAGATCTCTGTACCTTTCTCT  
 TAATTTTGCTGTGAAGCAAAAATGGTTCTAAAAAATCAAATCTTGAAAAAGGCACTGAA

121053 TGCCAAGAGCCTGGGGGAAGAGAGGGATGAATCGGTGGAGCAGAGAGGATTTTTAGGCTA  
 GGGAAACTATTGTGTATGATACTATAATGGTGGATACATGTCATCAGACGTTTGTCCAAA  
 CCCATAGGATGTACAGCACCAACAGTGAACCCTAATGTATACTATGGATTCTGGATGATA  
 TTGTCAGTATAGGCTCATCATTGTAACCAGTGCCTACTCTGGCATGGGATGTTGATAG  
 TGGGGAAGGCTGTGCATGTTTGGGGCGGGGGCTATATGGGAGATCTCTGTACCTTTCTCT  
 [T, C]  
 AATTTTGCTGTGAAGCAAAAATGGTTCTAAAAAATCAAATCTTGAAAAAGGCACTGAAG  
 TATAAATGGAGCAGTATTGGGGCACCATAAACCATCCAGTCTCTCCAGAACTGCAAAAC  
 TAACTGCTACTACAGCAAGAGAGAGGGGTGAGCAACTACCTGCCTGCAGCGGGGGTAGGG  
 GGGAGTTGGGGGAAATGGCGGGGGGTGGGGGTCCCTGACAGTTTCTCAGAAAGTGGGTTG  
 ACGTATTCTGGAGGAGGAGGAGGAGGAGGCAGCATGAGGCAGCAGGCAGGATGCATTCTCT

121246 CTCATCACTTGTAAACCAGTGCCTACTCTGGCATGGGATGTTGATAGTGGGGAAGGCTGT  
 GCATGTTTGGGGCGGGGGCTATATGGGAGATCTCTGTACCTTTCTCTTAATTTTGCTGTG  
 AAGCAAAAATGGTTCTAAAAAATCAAATCTTGAAAAAGGCACTGAAGTATAAATGGAG  
 CAGTATTGGGGCACCATAAACCATCCAGTCTCTCCAGAACTGCAAACTAACTGCTACTA  
 CAGCAAGAGAGAGGGGTGAGCAACTACCTGCCTGCAGCGGGGTAGGGGGAGTTGGGGG  
 [G, A]  
 AATGGCGGGGGGTGGGGGTCCCTGACAGTTTCTCAGAAAGTGGGTTGACGTATTCTGGAG  
 GAGGAGGAGGAGGAGGCAGCATGAGGCAGCAGGCAGGATGCATTCTTGAAGTGGATCAT  
 GGCCAGGTCTTACAGCTCTCCCACTGCCACCTTTGGCAAACATTCTGGGATCCTGAAG  
 GCTCAGACAAGGCCCATCCCTCTTATGTTACCATGGGGATTATCTCTCTCTCTCTCTCTC  
 TTTTAGTTTTCCTCCAAGGAAGGTTGTCACTCCTTTTCCAAAAGGAAGAAGGACCAAG

121475 AACTGCTACTACAGCAAGAGAGAGGGGTGAGCAACTACCTGCCTGCAGCGGGGTAGGGG  
 GGAGTTGGGGGAAATGGCGGGGGGTGGGGGTCCCTGACAGTTTCTCAGAAAGTGGGTTGA  
 CGTATTCTGGAGGAGGAGGAGGAGGAGGCAGCATGAGGCAGCAGGCAGGATGCATTCTT  
 GAACTGGATCATGGCCAGGTCTTACAGCTCTCCCACTGCCACCTTTGGCAAACATTCTCT  
 GGGATCCTGAAGGCTCAGACAAGGCCCATCCCTCTTATGTTACCATGGGGATTATCTCTT  
 [C, T]  
 CTCCTTTTCTCTTTTAGTTTTCCTCCAAGGAAGGTTGTCACTCCTTTTCCAAAAGGAA  
 GAAGGACCAAGTGAATGATTTTCAAGGGCACAGTGTGTTATTTCTCGAGGGAACCTCTG  
 CCATGTTCTTGAGCATGTTGCTCGTTTTCTCCTTCCCTTCTCTTCTTAGCCCTCTCCCTC  
 TCGTCTCTCCTACCTCTCCCCCTTTTCTCTTTTCTTTCATCACAAGACTACAAAGAGT  
 ATACATGGTCACTGTAGAGGCCTTGGAAGTGCAGGGGAGTGCAAAGAAGAAAGTAAAAAT

121715 GGGATCCTGAAGGCTCAGACAAGGCCATCCCTCTTATGTTACCATGGGGATTATCTCTT  
 CCTCCTTTTCTCTTTTAGTTTTCCTCCAAGGAAGGTTGTCACTCCTTTTCCAAAAGGA  
 AGAAGGACCAAGTGAATGATTTTCAAGGGCACAGTGTGTTATTTCTCGAGGGAACCTCT  
 GCCATGTTCTTGAGCATGTTGCTCGTTTTCTCCTTCCCTTCTCTTCTTAGCCCTCTCCCT  
 CTCGCTCTCTCCTACCTCTCCCCCTTTTCTCTTTTCTTTCATCACAAGACTACAAAGAG  
 [T, A]  
 ATACATGGTCACTGTAGAGGCCTTGGAAGTGCAGGGGAGTGCAAAGAAGAAAGTAAAAAT  
 CCTGTAAATATCCTTTGTCCAAAGAAATCCACCACTAACACGTTGATAATCGTACTTCTG  
 AATCTTTTCTCTGCATCTACATTGGCCCCAATGCCTGGTGTCTCCACTGGCCCCACAGTA  
 CCCCTCCCACCTGTACCTACCTGTCCAAGTTTCCCTGCCCTCGGGTACTGGCAGGGGT  
 GTGACCGTGTCTGCCACAGCCTGTGCCTTCCCTGTGTTACTCCATCAGCTCCTTCTG

122390 TTCTGCCTCAGAAGGGGGAGTGCTACTGCTGCTGCTAGAGCTGAGGGAGACGGACA  
 CCACTCTCCCCGTAACACTAGATTCTCAGGAATAGATACAACACCTTCCAAACTGCAGC  
 TGACACCAGCTGTACATTGTAACAAGACTTTTAAGATTAGGAATGTCAGAGAGATATTA  
 CCCACAGCAGTTACATCACATCTGCTTACAGTCTGGCTGTTCTTGGAGCCAGAAATCCA  
 GGCCTGTTCCAGGGTGTCCAATTGAGCTGTGCTCTTGACCTGCCTCGAGGCAGCTGAAGC  
 [C, A]  
 AGCTTGCCCTGACCTCCAGGAGTAGCTGTTGCAGGCAGGCAGCTTAGCTCAAAATGAGAG  
 AAATATGGCTAATTTAAACAAAAATGAAAATAATTTTAAAAAGGATATTGGATAGCTAC  
 CAAATCCTTGGGATGTTTGGAAACCCAACTGGGAAGGTACCTTGTAAAAACAATGACC

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AAATCACACCATGGAAC TGGTCCCGGAGGAAGCCACTGCTGTGTCTGCCCCGGGCATATAC  
AGGGCGGTGGCCCCCTGGATGCTGCTGCAAGAACCATCCTTGTGACTGCTCCTGGAGTGGG

122606 CTGTTCTTGGAGCCCAGAATTCAGGCCTGTTCCAGGGTGTCCAATTGAGCTGTGTCTT  
GACCTGCCTCGAGGCAGCTGAAGCCAGCTTGCCCTGACCTCCAGGAGTAGCTGTTGCAGG  
CAGGCAGCTTAGCTCAAAATGAGAGAACTATGGCTAATTTAAACAAAAATGAAAAATAAT  
TTAAAAAGGATATTGGATAGCTACCAAATCCTTGGGATGGTTGAAACCCAAACTGGGA  
AGGTACCTTGTAAAAACAATGACCAAATCACACCATGGAAC TGGTCCCGGAGGAAGCCA  
[C, T]  
TGCTGTGTCTGCCCCGGGCATATACAGGGCGGTGGCCCCCTGGATGCTGCTGCAAGAACCAT  
CCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGTACCACCATCCCTGGAATGGC  
TTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATATGTCTGCTCCTGCCTGCCAC  
CCCACCTCCCATGGAAGCTCCCCGCTGATGCTTCACTTCCATCTTGATCAAGGGCAAGG  
TTACCTTCCATGCCACCCCACTCAGGGTTCCAGTCCCTCACCTCTGTCTGGAGGACCT

122767 AAACAAAAATGAAAAATAATTTAAAAAGGATATTGGATAGCTACCAAATCCTTGGGATGG  
TTGGAAACCCAACTGGGAAGGTACCTTGTTAAAAACAATGACCAAATCACACCATGGAA  
CTGGTCCCGGAGGAAGCCACTGCTGTGTCTGCCCCGGGCATATACAGGGCGGTGGCCCCCTG  
GATGCTGCTGCAAGAACCATCCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGT  
ACCACCATCCCTGGAATGGCTTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATA  
[T, C]  
GTCTGCTCCTGCCTGCCACCCCACTCCCATGGAAGCTCCCCGCTGATGCTTCACTTCC  
ATCTTGATCAAGGGCAAGGTTTACCTTCCATGCCACCCCACTCAGGGTTCCAGTCCCTC  
ACCTTCTGTCTGGAGGACCTAGGAGATCCAGGACTCTTGAGAGCTGGGCTGTGCACAGGT  
GGTGAATCACCAGCAGAAAGCTCTGCATCTAGTCTCTTCTCTTGGCCTCCAGACTGGAC  
GTTTGTCTTCCACCAACCCACCCCGCAACCGGAAGACTCTAGGAAGATCTCGTCCCTC

122957 CAAGAACCATCCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGTACCACCATCC  
CTGGAATGGCTTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATATGTCTGCTCC  
TGCTTGCCACCCACCTCCCATGGAAGCTCCCCGCTGATGCTTCACTTCCATCTTGATC  
AAGGGCAAGGTTTACCTTCCATGCCACCCCACTCAGGGTTCCAGTCCCTCACCTCTGT  
CGGAGGACCTAGGAGGATCCAGGACTCTTGAGAGCTGGGCTGTGCACAGGTGGTGAATCA  
[C, A]  
CAGCAGAAAGCTCTGCATCTAGTCTCTTCTCTTGGCCTCCAGACTGGACGTTTTGCTTC  
CCACCACCCACCCCGCAACCGGAAGACTCTAGGAAGATCTCGTCCCTCCCACTGTACT  
TTTGCTCCAGGCTGAGTGGCCATTCCGCCTTCTCTGTCTGTGTTCTTAACCCGGTCTT  
GCCTACTGTCTGGAAGAGGAGAAAGTGGTTCTGTAAAGTCTGCCTCTGAGAATCTCCACAC  
CTCTTTTCAGAATGGTCTGGGGAGTGGCGGGTGCCAGTGAGACGAAAGAGGAGGACGGAG

122963 CCATCCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGTACCACCATCCCTGGAA  
TGCTTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATATGTCTGCTCCTGCCTG  
CCACCCACCTCCCATGGAAGCTCCCCGCTGATGCTTCACTTCCATCTTGATCAAGGGC  
AAGTTTACCTTCCATGCCACCCCACTCAGGGTTCCAGTCCCTCACCTCTGTCTGGAGG  
ACCTAGGAGGATCCAGGACTCTTGAGAGCTGGGCTGTGCACAGGTGGTGAATCACCAGCA  
[G, A]  
AAAGCTCTGCATCTAGTCTCTTCTCTTGGCCTCCAGACTGGACGTTTTGCTTCCCACCA  
CCCCCCCCCGCAACCGGAAGACTCTAGGAAGATCTCGTCCCTCCCACTGTACTTTTGTCT  
CCAGGCTGAGTGGCCATTCCGCCTTCTCTGTCTGTGTTTCTTAACCCGGTCTTGCCTAC  
TGTCTGGAAGAGGAGAAAGTGGTTCTGTAAAGTCTGCCTCTGAGAATCTCCACACCTCTT  
TCAGAATGGTCTGGGGAGTGGCGGGTGCCAGTGAGACGAAAGAGGAGGACGGAGGACAGA

124458 CTTTTTTGAGACGTAGTCTCACTCTGTTGCCAGGATGGAGTGAGTTACATGATCTCGG  
CTCACTGCAAGCTCTGCCTCCCGGTTCAAGCGATTCCCCTGCCTCAGCCTCCCAAGTAG  
CTGGGATTACAGGTACCTGCCACCACACCTGGCTGATTTTTGTGTTTTTAGTAGAGACAG  
GGTTTACCATATTGGCCAGGCTGGTCTCGAATCCTGACCTCAAGTGATCCACCTACCT  
CTCGGCCTCCCAAAGTGTGGGATTACAGGCGTGAGCCACTGTGCCTGGCCCAGTGTAGT  
[C, G]  
CTTCTAAGCAAATCCATTCTAATCAAATGAAGGAACAGTGCTCCTCTTTAATAATCATAA  
ATAAGTGATAGATGAATAAGGAAATGAATCATGTATGCATTTATTTGTCCACAACACACA  
ATTGAGCTGGCATTTCTTGGAGGCATTTGTATAAACTTAGATGAGATCACGTCCCTTA  
GGATGTCAAGGTACTTGGCCTGATTTGCCATGAGGCCTCCAATGGAACTTTGTCAAGGA  
GTAGAAAACAGCCAATGTATGTGAAGTCCAAGTTCATTGGCACCTCCCTAGCCTCCTTGC

125449 AGCTTGAAAAATATGCTAAAGGAATTTTCTCATTGTAGGTGTTCTGTCCAGTTCCCTT  
AGTGCAGGCCTTCCCAGTGTAGGGTTATTTCTGCATGACTTTCTATAAAGCTGTATTTCT  
CTTCTTATCTAACTTCTCGTTCTTAGTCTAACTAGAAAGTTCATGCATATCCCTTTCTCC  
CTTCTCTCCATTTTCTTTTTATCTCTGAAACAATTAGGTACACACGTAGCTGGGAAGCCT  
TCTTGATGCCTCCAGAAAAATCTAGATCCCTCAAACATTGTTCTATCTCTTCTTTCT  
[G,A]  
TACCCCAATTTTTTCTCAATTATGCTCTTAAATTATCCTTCTGAAAGATTTTCTAATTT  
TGTTTGCTTCTTGTTGCCTTTTTCTCTTCTAGTTCACACACCTTTCTCTGTAAGATTTCT  
TAATGCTTATTTTATTATTATTATAGTTTATGTGGACAAGCATCCCTAGATGCTTACA  
TTAAAAGTATTTGTCTAAAAAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAG  
AAAGAAAGAGAGATAAATATGGAAGAAAGAGAAAAAAGGAAGAAAGGAAGAAAGAAAG

126753 AACATGTCTTCTTCCGGGTGAACATTCACAAGCTAAAGAAGGGAACCTCACCTTCCCTTG  
AGGAGAGCTTGCTGAACACCAGAGGATTTACCTCTTCCCCCTTCATAATGGAATAATC  
ACTGAGCTTTCTGCTAGAATAAAAAAATCATGGGCCGGGCACGGTGGCTCACGCCTGTAA  
TCCCAGCACTTTGGCAGACCGAGGCGGGTGGATCACTTGAGGTGAGGATCAAGACCAG  
CATGCCCAACATGGCGAAACCCCATCTCTACTAAAAATACAATCATTAGCTGGGCGTGGC  
[G,A]  
GTGCGCTCCTGTAATCTCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGG  
GAGGCGGAAGTTGCAGTGAGCTGAGTTTGGCGCCACTGCACTCCAGCTGGGCGACAAAGT  
GAGACTCTGCCTCAAAAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAA  
TAAATAAAATAAAATAAAATAAGACAAAGGAGATGATAAATTAAAGCCTAACATTACTA  
TATTCCTTTTATACTGAAGAATATGGTTTATATCTGTGGAAGATGAGTTTCTTAATACA

126957 CGGGTGGATCACTTGAGGTGAGGAGTTCAAGACCAGCATGGCCAACATGGCGAAACCCCA  
TCTCTACTAAAAATACAATCATTAGCTGGGCGTGGCAGTGCGCTCCTGTAATCTCAGCTA  
CTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGCGGAAGTTGCAGTGAGCTG  
AGTTTGGCGCCACTGCACTCCAGCCTGGGCGACAAAGTGAGACTCTGCCTCAAAAAAATAA  
AATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAA  
[-,T,G]  
ACAAAGGAGATGATAAATTAAAGCCTAACATTACTATATTCCCTTTTATACTGAAGAATAT  
GGTTTATATCTGTGGAAGATGAGTTTCTTAATACAACCTCAGAATTAGATAGGAGATCA  
CAAGGGGTAACCTCCCAAAGGAAGGGGAGAGGAAGGGGCTGGGTTAACAGTTCTGGGTG  
AGAAATAAGAGTTGAGTGGCCATGTGTATTGCAGCAGGTGGAGCTCCCTATACAAGGAAAG  
CACTGGGGCGGAAATGAGCATTATCTCTATTAGAATGGTCTTGTGCCTTCACTCCCTGT

126962 GGATCACTTGAGGTGAGGAGTTCAAGACCAGCATGGCCAACATGGCGAAACCCCATCTCT  
ACTAAAAATACAATCATTAGCTGGGCGTGGCAGTGCGCTCCTGTAATCTCAGCTACTCGG  
GAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGCGGAAGTTGCAGTGAGCTGAGTTT  
GCGCCACTGCACTCCAGCCTGGGCGACAAAGTGAGACTCTGCCTCAAAAAAATAAAATAA  
AATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAGACAA  
[A,-]  
GGAGATGATAAATTAAAGCCTAACATTACTATATTCCCTTTTATACTGAAGAATATGGTTT  
ATATCTGTGGAAGATGAGTTTCTTAATACAACCTCAGAATTAGATAGGAGATCACAAGG  
GGTAACTCCCAAAGGAAGGGGAGAGGAAGGGGCTGGGTTAACAGTTCTGGGTGAGAT  
AAGAGTTGAGTGGCCATGTGTATTGCAGCAGGTGGAGCTCCCTATACAAGGAAAGCACTG  
GGGCGGAAATGAGCATTATCTCTATTAGAATGGTCTTGTGCCTTCACTCCCTGTGCACT

128567 TTAGTCGGAGTCTCTCTCTGTTGCCAGGCTGGAGTGCAGTGGTGCAATCTTGGCTCGCT  
GCAACCTCTGCCTCCCGGGTTCAAGTGATTCTCCCTGCCTCAGTCTCCTAAGTAGCTGGG  
ATTACAGACATCTGCCACCATGCCAGCTAATTTTTGTATTTTTTAGTAGAGTTGGGGTT  
TCCCCATGTTGGCCAGGCAGGTCTTGAACCTCTGACCTCAGCTCCTGAAGAGCTGGGAT  
TACAGGTGTGAGCCAGCATGCCTGGCCTGAGTTTTTATTATTTGTGAATTTTATTTTTTT  
[T,-,C]  
CATCCCAGATGCACCTATATTGGTAGTCTAGTGATAAAAAACAATTTACCCATATATACCA  
ACATCTTTTTCAAGAACTTTGCATAGTGAAACCAGCAAAGTACTGAACTGGCCAGTCTGT  
CATAGGTGTCTTGCACATGACTCAGAGTCAGAAGCTGGATATAAACTTTTTTCTGTGTG  
TGTATATATGATCCATTTGTGTATTTCGGCTTTTGTAGTGGGACTTTTTTCAGTAGGCTTCTT  
GAAGGTTCCACTTCACTATTCTCACTGATGTGTGCTTACAGCATCTCTGCCATGGAGATT

128567 TTAGTCGGAGTCTCTCTCTGTTGCCAGGCTGGAGTGCAGTGGTGCAATCTTGGCTCGCT  
GCAACCTCTGCCTCCCGGGTTCAAGTGATTCTCCCTGCCTCAGTCTCCTAAGTAGCTGGG  
ATTACAGACATCTGCCACCATGCCAGCTAATTTTTGTATTTTTTAGTAGAGTTGGGGTT

FIGURE 3, page 101 of 107

TCCCCATGTTGGCCAGGCAGGTCTTGAACCTCCTGACCTCAGCCTCCTGAAGAGCTGGGAT  
TACAGGTGTGAGCCAGCATGCCTGGCCTGAGTTTTATTATTTGTGAATTTTATTTTTTT  
[T, -, C]

CATCCCAGATGCACCTATATTGGTAGTCTAGTGATAAAAAACAATTTACCCATATATACCA  
ACATCTTTTTCAAGAACTTTGCATAGTGAAACCAGCAAAGTACTGAACTGGCCAGTCTGT  
CATAGGTGTCTTGCAACATGACTCAGAGTCAGAAGCTGGATATAAACTTTTTCTGTGTG  
TGTATATATGATCCATTTGTGTATTCGGCTTTTGAGTGGGACTTTTTCAGTAGGCTTCTT  
GAAGGTTCCACTTCACTATTCTCACTGATGTGTGCTTACAGCATCTCTGCCATGGAGATT

128599 GAGTGCAGTGGTGCAATCTTGGCTCGCTGCAACCTCTGCCTCCCGGGTTCAAGTGATTCT  
CCCTGCCTCAGTCTCCTAAGTAGCTGGGATTACAGACATCTGCCACCATGCCCAGCTAAT  
TTTTGTATTTTTTAGTAGAGTTGGGGTTTCCCATGTTGGCCAGGCAGGTCTTGAACCTC  
TGACCTCAGCCTCCTGAAGAGCTGGGATTACAGGTGTGAGCCAGCATGCCTGGCCTGAGT  
TTTTATTATTTGTGAATTTTATTTTTTTCCATCCAGATGCACCTATATTGGTAGTCTAG  
[T, G]

GATAAAAAACAATTTACCCATATATACCAACATCTTTTTCAAGAACTTTGCATAGTGAAAC  
CAGCAAAGTACTGAACTGGCCAGTCTGTATAGGTGTCTTGCAACATGACTCAGAGTCAG  
AAGCTGGATATAAACTTTTTCTGTGTGTGTATATATGATCCATTTGTGTATTTCGGCTTT  
TGAGTGGGACTTTTTCAGTAGGCTTCTTGAAGGTTCCACTTCACTATTCTCACTGATGTG  
TGCTTACAGCATCTCTGCCATGGAGATTTTAGGCAGAGAGTGTTTAAAAGCTCTACTCAT

128843 ATTATTTGTGAATTTTATTTTTTTTCCATCCAGATGCACCTATATTGGTAGTCTAGTGAT  
AAAAACAATTTACCCATATATACCAACATCTTTTTCAAGAACTTTGCATAGTGAAACCAG  
CAAAGTACTGAACTGGCCAGTCTGTATAGGTGTCTTGCAACATGACTCAGAGTCAGAAG  
CTGGATATAAACTTTTTCTGTGTGTGTATATATGATCCATTTGTGTATTTCGGCTTTTGA  
GTGGGACTTTTTTCAGTAGGCTTCTTGAAGGTTCCACTTCACTATTCTCACTGATGTGTG  
[G, A, T]

TACAGCATCTCTGCCATGGAGATTTTAGGCAGAGAGTGTTTAAAAGCTCTACTCATAGTT  
TATAGAATTGCTAGTGCCACAAGGCCATTCAATTGTGGATGATGAAATTATTAGTTATAAG  
TGAACCTTCTAAAAATAAATCTTGGAAAGAAAACATGTTATAAGAAAATGAAGTCAGTCCTC  
TTACTAGGCAGTTCCCATCATCTTTCCATTTTGAGAAAATATCCTCAGTTCAGATGTATT  
ACTATGGTGATGTGTTTGCATTTCAACAAACCAACCAAGCCGTAAACTGAGCTCTGCAT

130388 CGGAAGGATGATGAAAAATGGGACGGGGAGGTGGCTGAGCCTGGGGTTTTGGAAGTAGGA  
TGGAATTAAATGGAAGGCAAATAAAAAAGCTTCCAAGATTGTGAGCTGCGACTGTCTGAG  
AGCTCAAACCAGAGTTGGCAAGAGGAACCAAGGAGAATGAGGACATTTTTTGTCAATTGA  
CAATGAGGTATACAATATATCCAGGAAAGGACAACCAGCAGCGACCTCCTGAAGCTAAAC  
AGAGATTATCTTAAGCCACATATGAGGGAACATTCTCAATGGCAAAGAGAAGCATTAAAC  
[T, C]

CTGGGACTGTCTACGTCTAAGGAAAAATTTGAGCATTTACATTAAAAATGGCCTGTAAACA  
AGCATTGAATATTAACCAGGCACTGTGCTAAGTGTGTTGCACACTTGTAAATCTTCCAAA  
CAATCCGATGAGGTGGGATTTCTATCTCCATTTTATAGAGGAAAAAACTAATGCACAG  
AGAGGTTGAGAACTTGCCAAAGTCACTCAGCTATTTAGCAGTGGGGTTGGGATGTGTC  
TCAGGCAGTCTTCCCTAGACTCTGTGCTCTTAAACACTACTATGGTTTTTTCAGCAGCAG

131191 CTTTTATAGCAAAGTATGGGTATACACATATTTTCATACACCTACACACACATACACAT  
GCAAGACGCGCATTTCTTAAGTCCCTAAAAATACCTTGATAATTAATGCTCCAAACATTC  
TCTGAGTGTGACCTTGGATGTCTAGGAGAAGCAGCCAGGAACACACTTGTTAGCCGGG  
GCAATGAGTAGTGGTGAATATGTTTACCTTGCTGATAAAGTCTCCAGTAGATGATGCAATT  
AAGATGCCACGATCTAGCCTTTGTATACACCTCCTTGTCTGCCGTCAAACAAATCCACC  
[G, C]

CTGTCCTTCCCATCTTCCCTCCTGCCATCTCCTGAAGTCCAGGAACGTCTCCAGCTTC  
CTACGTACTTGACAGTCTCTTTTGCCAACCTCAACCTCATTTAGATTGCAATTACATTCA  
CATCTTAATTTATGACTTAACAAGCATCTCACAAACATTTAATTCACTTTAACTTCACTA  
TGCATTTGAGGAGGAATATTTGAGGAGGAATGGTACTCCATTGCCAGCAATTAGATTGA  
CTTAATGATCTATGGCGAAATCTCCTTTTGGGCTTTGAACTTTTCATACATTTCTGCAAA

132702 TCAGCTTAGAGTTTTTCAGCTTAGAGTCAATTCCAGTGTGCGCTTCAGCACATCCAAAGA  
GAATATGACCGATGCTACAGTCTGCTCCTGGACTCCACTGGTATGATTCTTTGCCCC  
AGTATCAGTCTAATTTCCCATTTCTAGATGCTTTTTTCTTAATGACCCAACTGACTCCT  
TCAGGAGCTGGCATGAGATGAGATTTGTTTGCAGAGATGTATAAAAAATTTCAAAGCCCCA  
AAGGAGATTTACCACAGATCATTAAGTCCATCTAATTGTGCTCTACTACCCATTTAGA  
[C, T]

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GGGGACCCTGTTATGCTAACTCCTATCCTGTCTCTGTGAGTGATACAGTCAACACACAT  
GATGATCACAGCACCAGCTCAGACAGGTGTGTTTTAAACAAAAGTGTGTTATAAATGTA  
CAGCCTCAGCAGGGAATGTGGGGCGAAGAAACACACAAATACTTGGCTAGAGTCGGT  
CACAGGTGAAGATGGGGATGACTGTGTTTTCCGTTTCATCCAAACATTTTGGCCTGACTC  
AGATAATTTTTTTTCCAGCATATTCTGTTTGACACAAGGGAAACGGTGCAAATCCATCAC

133422 GCATTTGGGCTGCAGTCATGGAACCATGCAAGAAACATTCAAAGCATTGGCTAAGCAGGA  
TTTTTTTGTGTTGTGACCTGGTGTCCACGAACAGGCTTCAGGGAGCCTGAGAACCCTCT  
AGACCACTTGAAAAATCTGAATGCACTTTCTAGGAAAGAGTTCACAGCGTTCATCAA  
TTCCCTCCAAGCAGCCAATGACCAGAGAAAGGTTAAAAGTCACTGACACAGTACCGTTTT  
CTGTGCATCTATATCCTGAATCCAGGGTGATGCCGCTGACTTGCCTATCTTTCTCCTTG  
[G, C]  
TCTTCTAGAAAAAGCAAGTGAGTCAGACCAAGATCCGGGTCACTCAACCATCCTGTTC  
ATCTTGGCCGGCTGCATTGTGTTTGTGACGATCCCTGCTGTCATCTTAAGTACATCGAG  
GGCTGGACGGCCTTGAGTCCATTTACTTTGTGGTGGTCACTCTGACCACGGTGGGCTTT  
GGTGATTTTGTGGCAGGTAAGCACCTGGGCAGGCCAGGCACTGGGGCTCTGGCGGGAAA  
AATAATCTGTTGGCTGTGCTTTTCGCAATCGATAAAAGATGTTGCGGGAGAAGCAAATGA

133447 ATGCAAGAAACATTCAAAGCATTGGCTAAGCAGGATTTTTTTGTTTGTGTTGACCTGGTGT  
CCACGAACAGGCTTCAGGGAGCCTGAGAACCCTCTAGACCACTTGAAAAATCTGAATGC  
ACTTTTCTAGGAAAGAGTTCACAGCGTTCATCAAATTTCTCCAAGCAGCCAATGACCAG  
AGAAAGGTTAAAAGTCACTGACACAGTACCGTTTTCTGTGCATCTATATCCTGAATCCAG  
GGTGATGCCGCTGACTTGCCTATCTTTCTCCTTTGGTCTTCTAGAAAAAGCAAGTGAGT  
[C, A]  
AGACCAAGATCCGGGTCACTCAACCATCCTGTTCACTTGGCCGGCTGCATTGTGTTTG  
TGACGATCCCTGTGTCTCTTTAAGTACATCGAGGGCTGGACGGCCTTGAGTCCATTT  
ACTTTGTGGTGGTCACTCTGACCACGGTGGGCTTTGGTGATTTTGTGGCAGGTAAGCACC  
CTGGGCAGGCCAGGCACTGGGGCTCTGGCGGGAAAAATAATCTGTTGGCTGTGCTTTTCG  
CAATCGATAAAAGATGTTGCGGGAGAAGCAAATGAAGATGACTCAGTGTCACTACTGCTG

133956 CGGGAAAAATAATCTGTTGGCTGTGCTTTTCGCAATCGATAAAAGATGTTGCGGGAGAAG  
CAAATGAAGATGACTCAGTGTCACTACTGCTGTGAAGAGGCTCATTTCAAATCCCTAGTC  
CTATGTAATATAAATACCATAGGTTTTTTCTGCTATGAAAAGAAAGCCAACCTTTCTCT  
TCTCAGGATGCTTATTTCCCTTATCGTCACACAAATTATGCAAGACTAAAGTGAATTTCT  
CATTAAATCTTGAACCTCTGAATTGAATTAAACCTCTCTAATCCAATGATAAAGGCTGTG  
[T, C]  
TAGGAAGTGGCACATAGGAACTCAGATGAGATTAGCATAGAATTTGGTCTGCAGTGACC  
TGCAGGTTTCAGCTTCCTGACTCCAGGTGAGAGCCATTGTCTCTGCAAACGTTGTCTCTGC  
ACATGCCCAGATACAAAGCTGAGGACTTTGGTGACTATGGGGAGCTGAGAACTGCCCAGA  
GGGAATATAAGCTCATGGATTATGCAAGGAGTGTATATACAAGCAATAGCCTTCTCTGTAA  
AAATAAATGTGGATGAGCTATGTTTAAAGGAAGTGAAGAAAAAATCATCAATTTTCATCTAG

134132 TCCTTCTCAGGATGCTTATTTCCCTTATCGTCACACAAATTATGCAAGACTAAAGTGAAT  
TTCTCATTAAATCTTGAACCTCTGAATTGAATTAAACCTCTCTAATCCAATGATAAAGGC  
TGTGTTAGGAAGTGGCACATAGGAACTCAGATGAGATTAGCATAGAATTTGGTCTGCAG  
TGACCTGCAGGTTACGTTCTCTGACTCCAGGTGAGAGCCATTGTCTCTGCAAACGTTGT  
CCTGCACATGCCCAGATACAAAGCTGAGGACTTTGGTGACTATGGGGAGCTGAGAACTGC  
[C, T]  
CAGAGGGAATATAAGCTCATGGATTATGCAAGGAGTGTATATACAAGCAATAGCCTTCTTT  
GTAAAAATAAATGTGGATGAGCTATGTTTAAAGGAAGTGAAGAAAAAATCATCAATTTTCAT  
CTAGGGCCAGGGAATTGCAAATGAAATGAGATTTAGTTTCATATGTGCACCAGTTTCCC  
AAAAGTGTGGTAGAAAGGTACGGATAGAAGGAAGAGGCCATCCTTCTCTTTTCTAATAG  
GATAGTTCTAGATGTTTCAGACAAGTGATCAGTTTCTACTACAAGAGTGAACACTTTGAT

136253 ACAGACCAATCTGGAGAATGCATGCCTGAAAAGACTGGAAGTTTATCTCTATCTTTTGGT  
AACAGTCTGCGAGTGATAGGGAAGGTTGCCCAATCATTGGAAAACGATACATTAAACAAGA  
GTTGATGGTTGCTGTGATTGACATAGTATGAACCTACTAGAAATGTAATCAGATCATT  
GATCCTGCAGGATTGATTGCTGATTTATTTGACGCTGACTCACTTTAGGACAGCCTTAC  
AATATTTGCGAACTCTGTCTGGGAGCACACAGAACTCCGAATCCAGATAAGCAGCTCA  
[A, T]  
AAAGGGATACTTAGAAGGGTGTGACTGCCTGCTTCATTGTTTCTTGTTCAGTAGCGCAC  
CCTAGTGACCATCTTTGCTGGGTAATAGTGACTTGCAAAGGTAAATATTTACTCCAGAT  
AGCCACAGGAGAAAGCTACAGATTTCTCTGGCGTAGCACAGAAACGAAATGAACCTCAA

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AAACCACTTACTGGTGC GGGAACCTCAGATCGTATCCTACAGCTCTAATGATGCAGGAGAG  
AGTTGTCTGAAAGGAAAAACCAAAAGCAGCTGCACCAACCGAAGGGGGCTTGGCACAGA

137206 GGGCTTGC AACCTGTTTTGCATGGCTGCCTCCAGCAGTGTCTGTAGGAAGTTAGAAATAA  
ATAGGCTAATTATTCAGAATAAATGACTGGTCCTTCAATGGAACAGCCAGTCAATGCAA  
TCAGGCAACTGGCCAATTTGGTTTGATGGATTTTTACTGTAATCCTTATTTATAAAATAA  
AGGGATTGGCCTCAAAGGTCCCTTTTAGTTCTAGTTTATGGTGACTCTAATTACTCAGCC  
TAACTGACCCTTTGGAGTAGCACTATGTAAACACCATTCTCAGTTAGCATTAAATCACT  
[G, T, A]  
TTGCTTGCATCAAAATCCCAGTAATGCCATTAAAGCTAATTTTACTTTACACATCCACT  
TGTCTCTTAGTAAATGTATGGGTGCTTAAGATGGAAATGGTTCCAAGAATTCCAAACCAT  
AGGGGGTGGTATGATTATATTTGATTTTTATTAAATAAATTTAGAGAAGTTTAAAGAAA  
ACAATGACAACCAGGCCTGATCTGTTGTCTGTAGTTTCAAGATTATTCATCCTTAACGC  
TCAGGTCAAGCATTAGTAGGTCAAGTTGGCCACTGGCGTTTTTTATTTCTGGTATTAAGG

137313 CCAGTCAATGCAATCAGGCAACTGGCCAATTTGGTTTGATGGATTTTTACTGTAATCCTT  
ATTTATAAAATAAAGGGATTGGCCTCAAAGGTCCCTTTTAGTTCTAGTTTATGGTGACTC  
TAATTACTCAGCCTAACTGACCCTTTGGAGTAGCACTATGTAAACACCATTCTCAGTTA  
GCATTAATCACTATTGCTTGCATCAAAATCCCAGTAATGCCATTAAAGCTAATTTTACT  
TTCACACATCCACTTGTCTCTTAGTAAATGTATGGGTGCTTAAGATGGAAATGGTTCCAA  
[C, A, G]  
AATTCCAAACCATAGGGGGTGGTATGATTATATTTGATTTTTATTAAATAAATTTAGAG  
AAGTTTAAAGAAAAACAATGACAACCAGGCCTGATCTGTTGTCTGTAGTTTCAAGTTAT  
TCATCCTTAAAGCTCAGGTCAAGCATTAGTAGGTCAAGTTGGCCACTGGCGTTTTTTATT  
TCTGGTATTAAGGTTAGTGGTCAAGAATCGAGGGAAGTAAAGCCTTAAGTTAGGCTTTTT  
TGGGTAAGGGATGGGTACCCCCCTTGCCCTCTAACCCGGTCCACCTTGTACACAGCAA

137335 TGGCCAATTTGGTTTGATGGATTTTTACTGTAATCCTTATTTATAAAATAAAGGGATTGG  
CCTCAAAGGTCCCTTTTAGTTCTAGTTTATGGTGACTCTAATTACTCAGCCTAACTGACC  
CTTTGGAGTAGCACTATGTAAACACCATTCTCAGTTAGCATTAAATCACTATTGCTTGC  
ATCAAAATCCCAGTAATGCCATTAAAGCTAATTTTACTTTACACATCCACTTGTCTCTT  
AGTAAATGTATGGGTGCTTAAGATGGAAATGGTTCCAAGAATTCCAAACCATAGGGGGTG  
[G, A]  
TATGATTATATTTGATTTTTATTAAATAAATTTAGAGAAGTTTAAAGAAAAACAATGAC  
AACCAGGCCTGATCTGTTGTCTGTAGTTTCAAGTTATTCATCCTTAACGCTCAGGTCAA  
GCATTAGTAGGTCAAGTTGGCCACTGGCGTTTTTTATTTCTGGTATTAAGGTTAGTGGTC  
AAGAATCGAGGGAAGTAAAGCCTTAAGTTAGGCTTTTTTGGGTAAGGGATGGGTACCCCC  
CTTGCCCTCTAACCCCGGTCCACCTTGTACACAGCAAACCTAACAGCTGAGTGTAAACA

137951 TTCACTACATGGAATGGAATATGTGTCTCTGCAAAGACCATATGCTAGATCATGGTTAA  
AGTAACATTTGGTTGTTTTAGGGGGGAAACGCTGGCATCAATTATCGGGAGTGGTATAAG  
CCCCTAGTGTGGTTTTGGATCCTTGTGGCCTTGCCCTACTTTGCAGCTGTCTCAGTATG  
ATCGGAGATTGGCTACGGGTTCTGTCCAAAAGACAAAAGAAGAGGTAGGACCCCTTCTT  
AACCTATGAATGTTCTGAGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCC  
[T, C]  
GTGGGCTGGAGTGTCTCTGGCTCGGTTTTGCAGGGGGAGCGGGGGCGGGTCATAGGCTT  
CCTCATGTTGAATCAGTCCTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCT  
TTTTTTTGGCAGGTGAGAAAATATGGTGATTCTGTTTACCAGCCCATAAATCCTGGAAAAA  
CTAGTAAACAACAGCTGATTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACT  
ATGGCTGAGTGTGTGTGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAG

138206 CCTGAGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCTGTGGGCTGGAGTGT  
TTCTGGCTCGGTTTTGCAGGGGGAGCGGGGGCGGGTCATAGGCTTCTCATGTTGAATC  
AGTCCTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCTTTTTTTGGCAGGT  
GAGAAAATATGGTGATTCTGTTTACCAGCCCATAAATCCTGGAAAACTAGTAAACAACAG  
CTGATTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACTATGGCTGAGTGTGT  
[G, C]  
TGTGGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAGAAAGGCAGTTGAACG  
CCAAGAATCTTCTCTGATTAGTAAGAACTGAAATCATCGAACATTGACCAGCTACGGG  
GAAGTGAGCCCAATGGGCCTCTTTCATTATCCCTCTTGGTTGTACATCCATAGAGAC  
AAATATACATCCCTGAGGAAGGGCCGTGCATGTAACCTTACATGAAGGGAAGTAAAGGAA  
GACATATGAAGGAAAGATAGATTTTGTGATTAAAAATAAATATTCATGTAGCTCTCTTA

138207 CTGAGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCTGTGGGCTGGAGTGT  
TCTGGCTCGGTTTTGCAGGGGAGCGGGGGCGGGTCATAGGCTTCCTCATGTTGAATCA  
GTCCTTCAAAGCTAAGGAGAATAGAATACAGTTATTCTGGATTCTTTTTTGGCAGGTG  
AGAAAATATGGTGATTTCGTTTTACCAGCCCATAAATCCTGGAAAACTAGTAAACAACAGC  
TGATTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACTATGGCTGAGTGTGTG  
[T, G]  
GTGGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAGAAAGGCAGTTGAACGC  
CAAGAATCTTTCCTGATTACAGTAAGAACTGAAATCATCGAACATTGACCAGCTACGGGG  
AAGTGAGCCCAATGGGCCTCTTTCACCTATCCCCTCTTGGTTGTACATCCATAGAGACA  
AATATACATCCCTGAGGAAGGCCGTGCATGTAACCTTACATGAAGGGAAGTAAAGGAAG  
ACATATGAAGGAAAGATAGATTTTGTGATTAAAAATAAATATTTCATGTAGCTCTCTTAG

138210 AGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCTGTGGGCTGGAGTGTCTTCT  
GGCTCGGTTTTGCAGGGGAGCGGGGGCGGGTCATAGGCTTCCTCATGTTGAATCAGTC  
CTTCAAAGCTAAGGAGAATAGAATACAGTTATTCTGGATTCTTTTTTGGCAGGTGAGA  
AAATATGGTGATTTCGTTTACCAGCCCATAAATCCTGGAAAACTAGTAAACAACAGCTGA  
TTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACTATGGCTGAGTGTGTGTG  
[-, G]  
GGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAGAAAGGCAGTTGAACGCCAA  
GAATCTTTCCTGATTACAGTAAGAACTGAAATCATCGAACATTGACCAGCTACGGGGAAG  
TGAGCCCAATGGGCCTCTTTCACCTATCCCCTCTTGGTTGTACATCCATAGAGACAAAT  
ATACATCCCTGAGGAAGGCCGTGCATGTAACCTTACATGAAGGGAAGTAAAGGAAGACA  
TATGAAGGAAAGATAGATTTTGTGATTAAAAATAAATATTTCATGTAGCTCTCTTAGGAA

138805 TAGGAAGAGAGGAAAAAGAAAGGAGGAAGGCCAAGGAAGGAGAAAAAAGAGCTAAAAGA  
AAGGAAGGGAGATAAGAAAAACCAAGAAATAGAGGGCCAGCCTCTGTTTGCTTCATTCT  
GTATAAAAGGCCCCAGGAGAAAGTTGCTGAATGGAGAGATTTCCACATCAGTTTCCTGG  
GCCCATATGCTAATTTTCTGGTTTATATAAGTAAGCCAGGAAAGTAAAGCAATGCAATTT  
CCAGACCGGTTCCCCAGACAGCTAACTGACCTGCTGAAAATCAGCTATAACAAAAGAGAA  
[G, C]  
GGAACAACATGAATATTGACTTTCCTGGATGCACAAATTTGAGTTCCTCATTGTCAGAGG  
GAAGCATGGGACTTATACTGTCTGCCCTGTTTATTAAGAGCCAAGAAATTTGGTGCTGAT  
CCTCAGGCAAACTCCACTCTAAGGAGGCCTGTTCTGTGGGCTTTGGCAGAATAGGCCGT  
CTTCTGCAACCCTGACTGGGGGAAGTGGGTTACCAGGTGCCCTGGAGCATCTTCTTAAAC  
CAGGGAAAGCCCCACAGCACATGACCATAGCATGGCCAGATAGGGTGGCCACCCATCCC

140339 ACCTCCAGACTACCAAGAGGAAAAACAAGGACCTCAAAAAGACCTTGCCCGAGGACGTT  
CAGAAAATCTACAAGACCTTCCGGAATTACTCCCTGGACGAGGAGAAGAAAGAGGAGGAG  
ACGGAAGAGATGTGTAACCTCAGACAACCTCCAGCACAGCCATGCTGACGGAAGTATCCAG  
CAGCACGCTGAGTTGGAGAACGGAATGATACCCACGGACACCAAGACCGGGAGCCGGAG  
AACAACCTATTACTTGAAGACAGAACTAAATGTGAAGGACATTGGTCTTGGACTGAGCG  
[-, T]  
TGT  
CTTTTGTAGTCCAAAATTACATAGCATTGAAGAATATATTTCACTGTGCCATAAACAACCTG  
AAAGCTTGCTCTGCCAAAAGGAATCAGAGAACAAGAACTTCATTTAGATAGCAAACGCA  
GGACACACCAAGAGTGTCCGTGCACGTAGCCGTTCTGGCCGTACATGTTAAGGGCATT  
CAGTGGCAGTGCTGTACCCCTGGGCAGTGCTACCTGGGCACACACGTAGACAAGGGCAGC

140340 CCTCCAGACTACCAAGAGGAAAAACAAGGACCTCAAAAAGACCTTGCCCGAGGACGTT  
AGAAAATCTACAAGACCTTCCGGAATTACTCCCTGGACGAGGAGAAGAAAGAGGAGGAGA  
CGGAAAAGATGTGTAACCTCAGACAACCTCCAGCACAGCCATGCTGACGGAAGTATCCAGC  
AGCACGCTGAGTTGGAGAACGGAATGATACCCACGGACACCAAGACCGGGAGCCGGAGA  
ACAACCTATTACTTGAAGACAGAACTAAATGTGAAGGACATTGGTCTTGGACTGAGCGT  
[-, G, T]  
GT  
TTTTTAGTCCAAAATTACATAGCATTGAAGAATATATTTCACTGTGCCATAAACAACCTGA  
AAGCTTGCTCTGCCAAAAGGAATCAGAGAACAAGAACTTCATTTAGATAGCAAACGCA  
GACACACCAAGAGTGTCCGTGCACGTAGCCGTTCTGGCCGTACATGTTAAGGGCATT  
AGTGGCAGTGCTGTACCCCTGGGCAGTGCTACCTGGGCACACACGTAGACAAGGGCAGCT

140360 AAAAAAAGGACCTCAAAAAGACCTTGCCCGAGGACGTTTCAAAAATCTACAAGACCTTC  
CGGAATTACTCCCTGGACGAGGAGAAGAAAGAGGAGGAGACGGAAGAGATGTGTAACCA  
GACAACTCCAGCACAGCCATGCTGACGGAAGTATCCAGCAGCACGCTGAGTTGGAGAAC

GGAATGATACCCACGGACACCAAAGACCGGGAGCCGGAGAACAACTCATTACTTGAAGAC  
AGAAACTAAATGTGAAGGACATTGGTCTTGGACTGAGCGTTGTGTGTGTGTGTGTGTGTG  
[- , T]

GTTTTTAATATTCACTGAGACATGTGCCTTAAACAGACTTTTTTAGTCCAAAATTACAT  
AGCATTGAAGAATATATTTCACTGTGCCATAAACAACTGAAAGCTTGCTCTGCCAAAAGG  
AATCAGAGAACAAGAACTTCATTTAGATAGCAAACGCAGGACACACCAAGAGTGTCCGT  
GCACGTAGCCGGTTCTGGCCGTACATGTTAAGGGCATTTCAGTGGCAGTGCTGTACCCCT  
GGGCAGTGCTACCTGGGCACACACGTAGACAAGGGCAGCTATTCCTTAGACCAGCCTCCT

140366 AAGGACCTCAAAAAGACCTTGCCCGAGGACGTTTCAAGAAATCTACAAGACCTTCCGGAAT  
TACTCCCTGGACGAGGAGAAGAAAGAGGAGAGACGAAAAGATGTGTAACTCAGACAAC  
TCCAGCACAGCCATGCTGACGGACTGTATCCAGCAGCAGCTGAGTTGGAGAACGGAATG  
ATACCCACGGACACCAAAGACCGGGAGCCGGAGAACAACTCATTACTTGAAGACAGAAAC  
TAAATGTGAAGGACATTGGTCTTGGACTGAGCGTTGTGTGTGTGTGTGTGTGTGTGT  
[T, -]  
AATATTCACACTGAGACATGTGCCTTAAACAGACTTTTTTAGTCCAAAATTACATAGCATT  
GAAGAATATATTTCACTGTGCCATAAACAACTGAAAGCTTGCTCTGCCAAAAGGAATCAG  
AGAACAAGAACTTCATTTAGATAGCAAACGCAGGACACACCAAGAGTGTCCGTGCACGT  
AGCCGGTTCTGGCCGTACATGTTAAGGGCATTTCAGTGGCAGTGCTGTACCCCTGGGCAG  
TGCTACCTGGGCACACACGTAGACAAGGGCAGCTATTCCTTAGACCAGCCTCCTGAAAGA

141183 TTGGAAGCAGATCAGAGCACACGTACGAAAAGGTGCAATTGCTTTTTCTCATGACAAAAGA  
AAAAAATAATCACAAACACATCAGCTGTGGATATCACCTTAACCAATGACAGAAGCCT  
GCTGAGTTTGGTCTTTCTCACAGGGTAGGTAGTCCACATGAAGTGGCGAGCAGTGGTGA  
AAACATGACATCAACTGCTGCGTGGTTAAAGGCCAATCATGCATTTTCTCAGTGGGTGC  
AATGGTGACAATAAACTGATTTGGAATGTCCATGTACTTTGGTTATAACTTGTTTTGAT  
[A, G]  
AGAGGGGTAGAAATACCAAAACAATTGCCTTGCATGATGCCAGTGGCTTGCTGTTCTGTC  
TAGCTGATCCTACATTTTACAAAAGTAGACATCCTGCATTTCTGAGACACACTGAGGAG  
GACCATGGCATCTTCCATCTCAGGGCTTTTTGTCCCTTGGGTGTCTTAGGGTAGACATA  
GTGATAAGATCCAATCTCGCTATCTCCAAACAAAAAGAAAATGTACCCCTTGACAGTAA  
GCTTGAAATGTTTTTATTGCTTGACGCGTAAGTGCCATTAATTCCATTTAACAATGATAC

141545 AGCTGATCCTACATTTTACAAAAGTAGACATCCTGCATTTCTGAGACACACTGAGGAGG  
ACCATGGCATCTTTCCATCTCAGGGCTTTTTGTCCCTTGGGTGTCTTAGGGTAGACATAG  
TGATAAGATCCAATCTCGCTATCTCCAAACAAAAAGAAAATGTACCCCTTGACAGTAA  
CTTGAAATGTTTTTATTGCTTGACGCGTAAGTGCCATTAATTCCATTTAACAATGATACT  
TAGAAATATTTAAATATTTTCACTTTTACTTTTATGTTTGGGCATTCCTTTATTCTGAAAA  
[A, T]  
GTCACCACTGCTCCTTGCTTGTCTTACATCTCACATCGGTTACTCACTAAAACCTGGAAC  
ACCCTAGACTGATTGTTCCAGGCAAACGATAAGCTAACACATCATAATTATGATTGGTC  
TGTGAGGCTAGAACATCCCGCAGAGGAAAGTCGGGGAATGGCTAGTCATAGGTTGCATGA  
TGATTTTAAATGGGTTTGTATCAGAAAGGGGAAAATACATCTCCTGTGTATGCCTCAGT  
CTTTATCATAATTGGCTGGTTACAGCTAGCTCTTGGGGCCACACGTGAAAGCATTTGGA

142316 TTGTACCCACGACATCCTCAACCACTGGTACCATGGAAGACCTGTCCCTGCCCATTTCTC  
AAAATGCACAGCTCTTCCCTGCCTGGAGCACATGAAGTCCCATCTCCCTGTCCCCAGAC  
CTTTAGGCTCTGTTGAAGTTCTGGCATTGCTTATGAGACCCCTCCTGTCCAAGGAAGGTC  
TAAGTCAACTCCTCCATTGGACTGGAGATGAGGCTCACTGGTGACATCCTGTGTGCGACTC  
AGTAATAAATAGTCACTTGGGAGGCGATGTTTATGCAGGTGTGGATGTTGAGTTTACTA  
[C, T]  
GGGAATCATTCCAGCCTGACAAAATGTGTTTTAAGGAATAGGTAGATAACTGGGACTTCC  
TCTGTTATTCTAACAAGTCGAAGCTTCCTAATTAACTGTCCATGGATCTCACTTATTTG  
GTTTCCACTCTGTGTTATCTGGTACGTTCTTTGTAGCAGTGTGTTAAATTCAGGCCCT  
ACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTTATCCAGTGCCTTCTGTGGGCCAGGCA  
CAGGATTAGGCATTTATGAACGTCAGCTCATTGAACTTCACGACACTATGTGGGAAGT

142436 CTTTAGGCTCTGTTGAAGTTCTGGCATTGCTTATGAGACCCCTCCTGTCCAAGGAAGGTC  
TAAGTCAACTCCTCCATTGGACTGGAGATGAGGCTCACTGGTGACATCCTGTGTGCGACTC  
AGTAATAAATAGTCACTTGGGAGGCGATGTTTATGCAGGTGTGGATGTTGAGTTTACTA  
TGGGAATCATTCCAGCCTGACAAAATGTGTTTTAAGGAATAGGTAGATAACTGGGACTTC  
CTCTGTTATTCTAACAAGTCGAAGCTTCCTAATTAACTGTCCATGGATCTCACTTATTT  
[T, C, G]

FIGURE 3, page 106 of 107

GTTCCTCACTCTGTGTATCTGGTACGTTCTTTGTAGCAGTGTGTTAAAATTCAGGCCCT  
ACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTGCCTTCTGTGGGCCAGGCA  
CAGGATTAGGCACTTTATGAACGTCAGCTCATTGAACTTCACGACACTATGTGGGAAGT  
ATTTGCAAACCCATTATATACACAAGGACACAGAGGCTCAGGGAAGCTATGTTATTTATC  
CAATGGCACACAGCAAGAAAGTGGTAGAGCTGGTATTCAAAGCTGACCAAAGCTGCTT

142719 ATGGATCTCACTTATTTGGTTTCCACTCTGTGTATCTGGTACGTTCTTTGTAGCAGTGT  
GTAAAATTCAGGCCCTACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTG  
CCTTCTGTGGGCCAGGCACAGGATTAGGCACTTTATGAACGTCAGCTCATTGAACTTCA  
CGACACTATGTGGGAAGTATTTGCAAACCCATTATATACACAAGGACACAGAGGCTCAGG  
GAAGCTATGTTATTTATCCAATGGCACACAGCAAGAAAGTGGTAGAGCTGGTATTCAAAG  
[G, T]  
CTGACCAAAGTCTGCTTTCAACTTCACTACAGTGTCTGTGTATGCATCCTTGTGATTGT  
GTGTGTTTGTGTGTATGTGTGTCTTTCTAGCTTCATGGACACAGCTTACAGATGTGGGA  
GCAGATATGGTGGAAATCTCCACCACCAAGAGGGCACAAGGTCTTTGTGTAAACATGGCTC  
AAAGGGTTGCCCCCTGCAGACACCTACTGTACATTTATTTGGTTTTGGAAATTTTGTATGT  
GGCACCTTTAAAAAATGCCCTTTGAAAGCACTCTTTGCACCTTACTTGCTAACCTTGT

142779 GTAAAATTCAGGCCCTACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTG  
CCTTCTGTGGGCCAGGCACAGGATTAGGCACTTTATGAACGTCAGCTCATTGAACTTCA  
CGACACTATGTGGGAAGTATTTGCAAACCCATTATATACACAAGGACACAGAGGCTCAGG  
GAAGCTATGTTATTTATCCAATGGCACACAGCAAGAAAGTGGTAGAGCTGGTATTCAAAG  
TCTGACCAAAGTCTGCTTTCAACTTCACTACAGTGTCTGTGTATGCATCCTTGTGATTG  
[T, C]  
GTGTGTTTGTGTGTATGTGTGTCTTTCTAGCTTCATGGACACAGCTTACAGATGTGGGA  
GCAGATATGGTGGAAATCTCCACCACCAAGAGGGCACAAGGTCTTTGTGTAAACATGGCTC  
AAAGGGTTGCCCCCTGCAGACACCTACTGTACATTTATTTGGTTTTGGAAATTTTGTATGT  
GGCACCTTTAAAAAATGCCCTTTGAAAGCACTCTTTGCACCTTACTTGCTAACCTTGT  
AGAAACTCTGCATACAGCAGGAATAAAATAGTTCAAAGCACTAAGCTGCATACTCTACCA

142931 TATATACACAAGGACACAGAGGCTCAGGGAAGCTATGTTATTTATCCAATGGCACACAGC  
AAGAAAGTGGTAGAGCTGGTATTCAAAGCTGACCAAAGTCTGCTTTCAACTTCACTACA  
GTGTCTGTGTATGCATCCTTGTGATTGTGTGTGTTTGTGTGTATGTGTGTCTTTCTAGC  
TTCATGGACACAGCTTACAGATGTGGGGAGCAGATATGGTGGAAATCTCCACCACCAAGAG  
GGCACAAGGTCTTTGTGTAAACATGGCTCAAAGGGTTGCCCCCTGCAGACACCTACTGTAC  
[A, C]  
TTTATTTGGTTTTTGAAATTTTGTATGTGGCACCTTTAAAAAATGCCCTTTGAAAGCAC  
TCTTTTGCACCTTACTTGCTAACCTTTGTAGAACTCTGCATACAGCAGGAATAAAATAGT  
TCAAAGCACTAAGCTGCATACTCTACCAAATGGAACAGGTGCATGTGTTGGTATGTGCAT  
AGATGCTTCCCCAAATGAGTCAAATCAGTCACACAGAGGGATCAAACATAACCTTGGGCT  
GGGGGTGGGAAAAATTTCTACATAACCCATTCCCTGAGACATTTGGCCAAGAATGTGATG